COURT OF FIRST INSTANCE
MILAN LOCAL DIVISION

UPC CFI no. 318/2024, no. 730/2024
DECISION
delivered on 6 November 2026

HEADNOTES:

1. Article 32 UPCA does not confer a general and abstract jurisdiction to certify that a patent is standard-essential vis-à-vis a standard-setting organisation or the market as a whole. Neither Article 56 nor Article 64 UPCA provide a basis for a principal declaration of essentiality with *erga omnes* effect. The UPC may, however, determine essentiality as an incidental issue insofar as necessary to decide an action for infringement or a declaration of non-infringement. That assessment concerns whether implementation of the specific standard necessarily entails implementation of the asserted patent claims.
2. Competence over a claim against an intermediary must be assessed by reference to the principal infringement facilitated by its services, on the basis of the parties' pleaded case and the information available to the Court, without requiring a comprehensive taking of evidence on disputed facts also relevant to the merits. Storage and logistics services connected with deliveries of the accused products to Italy may establish competence of the Milan Local Division under Article 33(1)(a) UPCA. Article 63(1) UPCA provides a remedy, not a separate rule of competence.
3. An intermediary may be subject to an injunction without itself directly infringing or being at fault; liability for damages requires additional conditions and cannot follow solely from the use of its services by an infringing third party.
4. Ownership of an SEP does not give rise to a presumption of dominance under Article 102 TFEU. The licence seeker bears the burden of establishing dominance, following definition of the relevant product and geographic markets and assessment of all relevant competitive circumstances, including barriers to entry and countervailing buyer power. Defining the market solely by reference to the asserted patent cannot make dominance automatic.
5. The procedural steps laid down in Huawei v ZTE must be followed in their chronological sequence, having regard to the parties' overall conduct and the circumstances of the case. Before commencing proceedings seeking an injunction or recall, a dominant SEP holder must identify the patent concerned and specify how it is allegedly infringed, providing sufficient information to enable the implementer to assess the allegation and an

opportunity to engage in licensing negotiations. Notice given upon or after commencement cannot cure the omission. The public availability of ITU registers and a request for an injunction conditional on acceptance of a licence are not adequate substitutes. In this case, the requirement was not satisfied before lodging the Statement of Claim; its purpose also requires notice sufficiently in advance to allow a willing implementer genuinely to respond.

6. A well-founded FRAND defence does not extinguish the patent proprietor's rights or dispose of all infringement remedies alike. In the present case, it precludes an injunction and the requested recall and destruction of products, but does not prevent a declaration of infringement, a finding of liability for damages or an order to provide information concerning past acts of use. An information order under Article 67 UPCA may also extend to an intermediary notwithstanding the withdrawal of the damages claim against it. Where liability is determined in principle, the amount of damages and the relevant compensable period may be reserved for subsequent proceedings under R. 125 et seq. RoP. Information may cover the period from grant without prejudging that determination. Any penalty payment must be directed to securing compliance with the information order, rather than enforcing injunctive relief that has been refused.

CLAIMANT AND COUNTERDEFENDANT

TELEFONAKTIEBOLAGET LM ERICSSON

21 Torshamnsgatan, Kista, 164 83 Stockholm, Sweden

represented by

Wim Maas, David Mulder and Sebastien Versaevel, at *Winston Taylor N.V.*, Paranassusweg 803-805a, 1082 LZ Amsterdam, The Netherlands

DEFENDANTS AND COUNTERCLAIMANTS

1) ASUSTEK COMPUTER INC.

1 F No. 15 Lide Rd Beitou Dist, Tapei City 11259, Taiwan

2) ARVATO NETHERLANDS B.V.

Brem 1, 6598 MH Heijen, The Netherlands

both represented by

Dr Alexander Wiese and Eva Geschke, at *Wildanger Kehrwald Graf v. Schwerin & Partner mbB Rechtsanwälte,* Couvenstraße 8, 40211 - Düsseldorf, Germany

Niccolò Ferretti, at *Nunziante Magrone Studio Legale Associato*, Foro Buonaparte 70, 20121 Milan, Italy

Rudolf Reichold and Thomas Hell, at *Bosch Jehle*, Flueggenstrasse 13, 80639 Munich, Germany

PATENT AT ISSUE

EP 2 727 342 entitled "*Reference picture signaling*"

DECIDING JUDGES

This decision has been issued by the Court of First Instance - Milan Local Division in the following panel:

-	Pierluigi	PERROTTI	presiding judge
-	Alima	ZANA	legally qualified judge and judge rapporteur
-	Rute	LOPES	legally qualified judge
-	Christoph	NORRENBROCK	technically qualified judge

LANGUAGE OF THE PROCEEDINGS

English

SUBJECT-MATTER OF THE PROCEEDINGS

Infringement action, FRAND defence and counterclaim for revocation

DATE OF THE ORAL HEARING

24 and 25 September 2026

1. Summary of facts

a) The parties involved in the dispute

Telefonaktiebolaget LM Ericsson

1. Telefonaktiebolaget LM Ericsson (hereinafter referred to as "Ericsson"), the Claimant in the infringement action and Defendant to the counterclaim for revocation, is a company incorporated and existing under the laws of the Kingdom of Sweden, with its principal place of business in Stockholm.
2. The Claimant states that it is recognised as a leader in innovation in the field of telecommunications. Through extensive research and development activities, it has built a substantial patent portfolio comprising tens of thousands of patents worldwide, reflecting its long-standing investment in technologies fundamental to mobile communications and multimedia systems.
3. In relation to the present dispute, Ericsson has stated that a significant part of its research activities concerns video coding technologies that contribute to the High Efficiency Video Coding standard (HEVC/H.265).
4. Ericsson has further indicated that it owns standard-essential patents ("SEPs") that are necessary for compliance with the HEVC/H.265 standard.
5. Ericsson has also stated that it is the sole proprietor of European Patent EP 2 727 342 (hereinafter "EP 342"), relating to reference picture signalling and decoded picture buffer management in video decoding. According to Ericsson, the patent is essential to the HEVC/H.265 standard and allegedly infringed.

The ASUS Group

6. ASUS is the name of a group of companies engaged in the design, manufacture, distribution and sale of consumer electronics, including computers, components and modules implementing video decoding technologies. According to the Claimant, the group operates worldwide and places its products on the market in several UPC Contracting Member States, including Italy, the Netherlands and other Member States of the European Union (see para 1.7, 5.1 e 5.7 of the Statement of claim).

ASUSTeK Computer Inc.

7. The parent company of the ASUS group is the defendant ASUSTeK Computer Inc ('ASUSTek'). Founded in 1989 and headquartered in Taiwan, ASUSTeK is the holding company of the ASUS group companies ("ASUS"). ASUS markets a wide range of laptops, notebook and desktop computers, as well as computer components, such as graphics cards, and a limited number of smartphones and tablets.
8. According to ASUS, most ASUS-branded personal computers do not include cellular functionality. ASUSTeK is the registered domain owner of www.asus.com.
9. According to the Claimant, ASUSTeK coordinates and directs the activities of its subsidiaries and affiliated entities engaged in the manufacture, marketing and distribution of ASUS-branded products worldwide.

Arvato Netherlands B.V.

10. Arvato is a logistics and warehousing company established in the Netherlands. It does not form part of the same corporate group as ASUSTeK; Arvato's involvement in the supply chain arises when a customer purchases ASUS-branded products through the website www.asus.com/it. According to the Defendants, its role is limited to storing the products in its warehouse in the Netherlands prior to purchase and subsequently arranging for the collection of the products from that warehouse and their delivery from the Netherlands to the customer in Italy by third-party carriers, such as UPS.

b) The accused products

11. The ASUS products at issue include laptops, desktop computers and related hardware equipped with processors and graphics processing units, in particular those manufactured by Intel and AMD, which, according to Ericsson, implement the HEVC/H.265 video decoding functionality. As such, Ericsson claims those products to be compliant with the HEVC/H.265 standard and to incorporate their patented technology alleged to be essential to that standard.

c) The alleged acts of infringement

12. According to Ericsson, the Defendants have been engaged, directly and/or indirectly, in the offering, marketing, use, importation and supply of products compliant with the HEVC/H.265 standard within the relevant Contracting Member States, thereby infringing European Patent EP 2 727 342, which is the subject of the present proceedings.

d) The proceedings

13. On 14 June 2024, Ericsson lodged its statement of claim, commencing an infringement action concerning EP'342. It alleged that the Patent was essential to the HEVC/H.265 video-coding standard. The action was initially brought against ASUSTeK, Arvato and Digital River Ireland Ltd.

14. On 29 August 2024, Arvato lodged a preliminary objection under R. 19 RoP, contending that the Court lacked competence to hear the claims against it. By order of 30 October 2024, the Court decided, pursuant to R. 20.2 RoP, to deal with the preliminary objection in the main proceedings.

15. On 13 September 2024, Ericsson lodged an application for leave to amend its claim, followed by a second application on 30 September 2024.

16. On 8 October 2024, the parties jointly requested that the Court:

(i) grant Ericsson's application for leave to amend the claim dated 13 September 2024;
(ii) grant Ericsson's application for leave to amend the claim dated 30 September 2024; and
(iii) extend until 29 November 2024 the time limit for the Defendants to lodge their Statements of defence and Counterclaims for revocation.

17. By order of 21 October 2024, the Court granted the joint application in full.

18. On 29 November 2024, the Defendants lodged their counterclaim for revocation and raised a FRAND defence. On the same date, they lodged an application under R. 262A RoP.
19. In its response to the R. 262A RoP application, Ericsson requested that access to confidential documents of either ASUSTeK or Ericsson be restricted under an *external-eyes-only* regime ("EEO regime"). The parties agreed that the time limits in the written procedure should be extended until the confidentiality arrangements had been finalised.
20. On 28 February 2025, the Defendants applied for a stay of the proceedings under R. 311 and/or R. 295 RoP on account of the commencement of insolvency proceedings concerning Digital River Ireland. On 13 March 2025, Ericsson applied to withdraw the infringement action against Digital River Ireland. On 24 March 2025, Digital River Ireland applied to withdraw its Counterclaim for revocation against Ericsson. By order of 8 May 2025, the Court permitted both withdrawals, and the proceedings continued between Ericsson, ASUSTeK and Arvato.
21. On 7 and 8 April 2025, the parties informed the Court that they had reached general agreement on the confidentiality regime, save for Ericsson's request for an EEO regime. On 28 April 2025, the judge-rapporteur took note of the parties' agreement and rejected Ericsson's request for an EEO regime. On 12 May 2025, Ericsson requested a review of that order. On 20 June 2025, the panel dismissed the request for review but, as this was the first decision concerning an EEO regime, granted leave to appeal. On 8 July 2025, Ericsson lodged an appeal (UPC CoA no. 632/2025).
22. On 30 June 2025, Ericsson lodged an application under R. 190 RoP. In its Reply to the Statement of defence and Defence to the Counterclaim for revocation, lodged on the same date, Ericsson accepted the Defendants' position that Arvato, acting as an intermediary, was not liable for damages. Ericsson also lodged an application to amend the Patent under R. 30.1 RoP, including one conditional auxiliary request.
23. Pursuant to R. 32 RoP, the written procedure closed on 27 October 2025, when Ericsson filed its Rejoinder to the Reply to the defence to the counterclaim.
24. On 23 December 2025, Ericsson requested that the dates of the interim conference and the oral hearing be fixed.
25. By order of 16 January 2026, the Court stated that it was awaiting the outcome of the appeal concerning the confidentiality regime before fixing the hearing schedule. Following consultations with the parties, the Court set the interim conference for 29 April 2026 and the oral hearing for 24 and 25 September 2026.
26. By order of 26 January 2026, the Court of Appeal dismissed Ericsson's appeal concerning the EEO regime. During the proceedings, the confidentiality regime was governed by the orders of 28 April 2025, 13 August 2025, 18 November 2025 and 18 September 2026, together with the Court of Appeal's order of 26 January 2026, as rectified by order of 6 March 2026.
27. On 1 April 2026, Ericsson lodged an application for provisional measures under R. 206 RoP (UPC CFI no. 1130/2026), after the proceedings on the merits had commenced. By order of 17 June 2026, the Court dismissed the application for lack of urgency. No appeal was lodged.
28. The judge-rapporteur held the interim conference on 29 April 2026.

29. By order of 25 May 2026, the judge-rapporteur dismissed Ericsson's application under R. 190 RoP.
30. The oral hearing was held on 24 and 25 September 2026.
31. In view of the close connection between these proceedings and the parallel action UPC CFI no. 319/2024 - 728/2024, and in the interests of efficient case management, a single recording of the oral hearing was made and stored in identical form in both case files. This avoided unnecessary repetition of the parties' submissions during the oral hearing.
32. During the oral hearing, the Defendants raised a procedural objection concerning the alleged unavailability of a document submitted by Ericsson, namely one of the licence agreements relied upon as a comparator. According to the Defendants, the circumstances surrounding the production of that document prevented them from effectively reviewing its contents and commenting thereon. The Claimant contested the Defendants' submissions and maintained that the document at issue had already been transmitted to the Defendants' former representative, such that the Defendants had access to the document prior to the hearing.
33. Reference is made to the hearing record for a full account of the parties' submissions on this issue.
34. The Court does not consider it necessary to rule on that procedural objection. The document in question is not material to the issues that are determinative of the present dispute and does not form part of the evidence on which the Court relies for the purposes of its assessment.

2. Parties' requests.

(amended version, applications R. 263 RoP 13.9.2024, 30.9.2024, leave granted by order 21.10.2024)

Ericsson requests that the Court, for the Contracting Member States, in which the Patent is valid and in force:

(a) declares that EP 2 727 342 B1 (the Patent) is essential to the HEVC/H.265 standard and that the Defendants, individually and jointly, (directly and/or indirectly) infringe the Patent, in particular by making, offering, placing on the market and/or using the Infringing Products as well as by importing or storing the Infringing Products (or components thereof) for those purposes and/or by supplying or offering to supply the Infringing Products (or components thereof) to persons who are not entitled to exploit the Patent (Articles 25, 26 and 64 UPCA);

(b) declares that the Infringing Products are considered "goods suspected of infringing an intellectual property right" within the meaning of Article 2(7)(a) of Regulation (EU) No 608/2013 (Article 64 UPCA);

(c) Only if the condition as mentioned under 7.3 [*that ASUS has not accepted Ericsson's licence proposal of 14 June 2024 within a reasonable period of time, but at the latest before 1.12.2024*] is met:

grants a permanent injunction for direct infringement and/or indirect infringement of the Patent by prohibiting:
Asustek ~~and Digital River, individually and jointly,~~ from infringing the Patent in any way, with immediate effect after service of the judgment to be rendered in this matter, in particular by making, offering, placing on the market and/or using the Infringing Products as well as by importing or storing the Infringing Products (or components thereof) for those purposes and/or by supplying or offering to supply the Infringing Products (or components thereof) to persons who are not entitled to exploit the Patent (Articles 63, 25 and 26 UPCA);
Arvato with immediate effect after service of the order to be rendered in this matter, to render storing, shipping and/or repairing services to ASUSTek ~~and/or Digital River Ireland~~ in relation to the Infringing Products (Article 63(1) UPCA);

(d) declares that the Defendants are jointly and severally liable for the damage suffered by Ericsson as of 7 May 2014, or as of 29 June 2016, or at another date to be determined by this Court, as well as any future damage Ericsson will incur as a result of the continuous infringement of the Patent (Articles 64 and 68 UPCA);

(e) orders the Defendants to pay damages or compensation to Ericsson in the amount to be determined in separate proceedings for the award of damages (Article 68 UPCA and Rules 118.1 and 125-144);

(f) orders the Defendants to provide counsel for Ericsson within 4 weeks after service of the judgment to be rendered in this matter with a written statement, substantiated with appropriate documentation, drawn up and signed by an independent auditor, or any other professional that this Court deems suitable for providing such statement, comprising:

(i) the origin and distribution channels of the Infringing Products including the full names and addresses of the legal entities that are involved in the manufacture of and trade in these systems;
(ii) the total number of the Infringing Products that the Defendants and/or any of their affiliates still have in stock either administratively or physically in the relevant Contracting Member States as of the date of judgment;
(iii) the total number of the Infringing Products that the Defendants, including any of its affiliates, have traded, sold, supplied, transferred and/or delivered to its customers and / or distributors in the relevant Contracting Member States as of 7 May 2014, or as of 29 June 2016, or another date to be determined by this Court, as well as any and all copies of invoices pertaining to those acts which also shows the price obtained for these products;
(iv) the identity including the full names and address of any non-consumer third person involved in the relevant Contracting Member States in the production, distribution, trade and/or sale of the Infringing Products or in the use of the Infringing Products as of 7 May 2014, or as of 29 June 2016, or another date to be determined by this Court;

(v) the internal costs calculated, or the purchasing costs paid, as well as the sales prices charged for the Infringing Products in the relevant Contracting Member States by the Defendants, including their affiliates, as of 7 May 2014, or as of 29 June 2016, or another date to be determined by this Court;

(vi) the total amount of net profit which the Defendants, including their affiliates, have gained as a result of trading the Infringing Products in the relevant Contracting Member States as of 7 May 2014, or as of 29 June 2016, or another date to be determined by this Court, and the calculation thereof (Article 67(1) UPCA);

(g) Only if the condition as mentioned under 7.5 [*that ASUS has not accepted Ericsson's licence proposal of 14 June 2024 within a reasonable period of time, but at the latest before 1.12.2024*] is met:
orders the Defendants to publish a rectification on their (joint) website(s), including www.asus.com and national pages on that website and/or subdomains, as well as on their social media channels, within 24 hours after service of the judgment in this matter and for a period of three months for each of the relevant Contracting Member States, with the header "RECTIFICATION" (in capitals), without any comments or remarks in any form whatsoever, exclusively with the following text, or a similar text to be drafted by this Court, and drafted in accordance with good printing practices, either in English and translated in the local language(s) of that Contracting Member State (Articles 64 and 80 UPCA):
"*Respected client,*
We are ordered to inform you that the Unified Patent Court by its judgment of [date] has decided that [name Defendant] infringed European patent EP 2 727 342 B1 of Ericsson.
We are prohibited from manufacturing, using, marketing, offering, selling, delivering, keeping in stock or otherwise trading these products.
Sincerely,
[name of the responsible defendant(s) and name and signature of a legal representative(s) of this or these defendant(s)]"

(h) Only if the condition as mentioned under 7.5 [*that ASUS has not accepted Ericsson's licence proposal of 14 June 2024 within a reasonable period of time, but at the latest before 1.12.2024*] is met:
orders the Defendants, at their expense, to recall and/or otherwise definitely remove from the channels of commerce in the relevant Contracting Member States all of the Infringing Products by sending registered letters to all of their (non-consumer) customers in the relevant Contracting Member States, within 14 days after service of the judgment to be rendered in this matter, containing exclusively the following text, or a similar text to be drafted by this Court, without captions or notes, either in English or translated in the local language(s) of that Contracting Member State:
"*Dear sir, madam,*

We are obliged to inform you that the Unified Patent Court has decided through a judgment of [date] that [name Defendant] infringed the European patent EP 2 727 342 B1 of Ericsson.
We are prohibited from manufacturing, using, marketing, offering, selling, delivering, keeping in stock or otherwise trading these products.
Through this letter we request you to immediately cease offering these products (online or offline, in brochures, etc.), and to immediately return all the infringing products in your possession to us. We will immediately reimburse the purchase price concerned and all costs made in connection with the return.
Sincerely,
[name of the responsible defendant(s) and name and signature of a legal representative(s) of this or these defendant(s) and/or other affiliate companies]"
while providing counsel for Ericsson within 1 month after sending these letters with an overview of all clients, persons and entities that these letters have been sent to as well as an overview of all clients, persons and entities that have returned the Infringing Products (Article 64(1), 64(2)(b) and 64(2)(d) UPCA);

(i) Only if the condition as mentioned under 7.5 [*that ASUS has not accepted Ericsson's licence proposal of 14 June 2024 within a reasonable period of time, but at the latest before 1.12.2024*] is met:
orders the Defendants to destroy, at their own expense, any Infringing Products still in stock in the relevant Contracting Member States, as well as all Infringing Products returned as referred to in order 10.1(h) above and any promotional material that includes Infringing Products, within 4 weeks after service of the judgment to be rendered in this matter, and to provide counsel for Ericsson with proper evidence of the full and timely compliance with this order within 10 days after the destruction (Article 64(1) and 64(2)(e) UPCA);

(j) orders the Defendants jointly and severally to comply with the orders under 10.1(c) and 10.1(f) – 10.1(i), subject to a recurring penalty payment of EUR 250,000 for each violation of, or non-compliance with, the order(s), plus EUR 100,000 for each day, a part of a day counting as an entire day, that the violation or non-compliance continues, or a recurring penalty of EUR 5,000 for each of the Infringing Products with which the order(s) is/are violated, or another amount as determined by this Court in the proper administration of justice (Article 63(2) UPCA and Rule 354.3);

(k) appends an order for the enforcement to its decision, while declaring that the judgment is immediately enforceable (Article 82(1) UPCA); and

(l) orders the Defendants to jointly and severally bear reasonable and proportionate legal costs and other expenses incurred by Ericsson in these proceedings and orders, insofar such costs are to be determined in separate proceedings for the determination of such costs, that the

Defendants pay to Ericsson by means of an interim award of costs an amount of EUR 100,000 within 14 days after service of the judgment in this matter (Article 69 UPCA, Rules 118.5 and 150.2).

The Defendants request the Court to order, with immediate enforceability, that:
- Ericsson's Infringement Action be dismissed;
- the Patent be revoked in its entirety;
- Ericsson be ordered to bear the costs of the Infringement Action;
- Ericsson be ordered to bear the costs of the Counterclaim for Revocation, including an interim award of costs in the amount of EUR 100,000 within 14 days after service of the judgment in this matter.

3. The patent at issue

35. The patent in suit is titled "*Reference Picture Signaling*" and was granted based on PCT application PCT/SE2012/050439 on 26 April 2012. It claims priority of US 201161503019 P from 30 June 2011. The European Patent Office published the grant of the patent in suit in the Patent Bulletin on 29 June 2016. The language of the patent is English.

36. The patent in suit relates to reference picture management in connection with video encoding and decoding, and in particular to reference picture signaling and buffer management. The patent claims are directed to a method of decoding an encoded representation of a picture of a video stream of multiple pictures (claim 1), a decoder configured to decode an encoded representation of a picture of a video stream of multiple pictures (claim 4), and a receiver (claim 7).

37. The general object of the patent is to provide an efficient reference picture signaling and buffer management in connection with video encoding and decoding ([0014]). As a specific problem of H.264/AVC, the patent mentions vulnerability to losses of pictures that contain MMCO (Memory Management Control Operations) commands, cf. [0008], [0009]. As a solution, the patent proposes explicit and absolute signaling of reference pictures and marking all others as unused for reference (cf. claim 1).

38. According to the Claimant (see para 3.3. of the Statement of Claim), the patent is currently in force in the following Contracting Member States: Austria, Belgium, Denmark, Germany, Finland, France, Italy, the Netherlands, Portugal, (as of 1 September 2024) Romania and Sweden (see Annex C3 of the Claimant). The patent is also validated and currently in force in the following Contracting Member States that have not yet ratified the UPCA: Czech Republic, Greece, Hungary and Ireland. The patent is also validated and currently in force in the following non-UPC countries: Norway, Poland, Spain, Switzerland, Turkey and the United Kingdom.

3.1. Background

39. The patent is related to video coding. The patent mentions as background H.264, also referred to as Moving Picture Experts Group-4 (MPEG-4) Advanced Video Coding (AVC), which was in the past the state-of-the-art video coding standard. It consists of a block-based hybrid video coding scheme that exploits temporal and spatial prediction ([0002] of the patent). In

contrast, the patent describes H.265, also known as High Efficiency Video Coding (HEVC) as a new video coding standard currently being developed in Joint Collaborative Team - Video Coding (JCT-VC). JCT-VC is a collaborative project between MPEG and International Telecommunication Union Telecommunication standardization sector (ITU-T). HEVC is expected to be considerably more efficient than H.264/AVC ([0003] of the patent). Therefore, the HEVC/H.265 standard represents an advancement in video compression technology, building upon its predecessor AVC/H.264. The HEVC/H.265 standard is a video compression standard developed to address the growing demand for higher video quality and improved compression efficiency, particularly in the context of emerging technologies like ultra-high-definition television, UHDTV, and 4K video streaming.

40. One of the objectives of the HEVC/H.265 standard is to achieve an improvement in compression efficiency over the AVC/H.264 standard while maintaining a similar level of video quality. This efficiency is important for handling the ever-growing volume of high-resolution content without significantly increasing the required bandwidth. The patent pertains to the domain of reference picture management within the context of video encoding and decoding. Specifically, the focus is on optimizing reference picture signaling and buffer management processes.

41. A video sequence comprises a plurality of individual pictures. Each picture is divided into smaller blocks or macroblocks, and redundancies within and between pictures are exploited for compression. Common techniques involve spatial compression (within a picture) and temporal compression (across pictures). Spatial compression leverages the similarity between neighbouring pixels within a picture, while temporal compression focuses on the differences between consecutive pictures.

42. The encoding process typically employs inter-predictive coding, where one or more reference pictures are used as a basis for predicting the content of a subsequent, e.g. current, picture. The encoder transmits the differences, i.e. residuals, between blocks of the reference and blocks of the current picture, along with any necessary information to recreate the current picture at the decoder's end. This predictive coding, combined with entropy coding techniques, significantly reduces the amount of data required to represent the video.

43. Upon reaching the receiver's end, the encoded video data undergoes decoding to reconstruct the original video sequence. The decoder starts by receiving the bitstream, typically a binary representation of the encoded video data. This bitstream contains both the payload, which encompasses the encoded video information, and control information, providing instructions for the decoding process.

44. The control information includes details on how to manage and utilize reference pictures in a decoded picture buffer (“DPB”). This DPB serves as a temporary storage unit for reference pictures, aiding in the reconstruction of subsequent pictures. The decoding process involves retrieving the reference pictures from the buffer, applying the necessary transformations, and combining them to reconstruct the pictures. The reference pictures thus act as anchors for the decoding process, allowing the decoder to infer the content of a current picture by referencing

the stored information. The references to preceding pictures guide the proper reconstruction of the video sequence.

45. The decoding process defined by the AVC/H.264 standard involves receiving encoded data, including control information indicating which reference pictures to store in the DPB. During the decoding process, which encompasses the reception of encoded data, the control information instructs the decoder which reference pictures should be stored in the DPB.

46. In the AVC/H.264 standard memory management control operations ("MMCO**")** play a pivotal role in managing references within the DPB. A vulnerability exists in the AVC/H.264 standard, particularly concerning the potential loss of pictures containing specific MMCO. This vulnerability introduces complexities in the synchronization of the decoding process.

47. One of the challenges associated with the AVC/H.264 standard revolves around its vulnerability to errors, particularly when pictures containing specific MMCO types face losses during transmission. The consequence of such losses is that the DPB of the decoder and the encoder may be out of sync, and the decoder may not be able to detect that. This has a cascading effect on subsequent decoding processes. The conventional methods, as per the prior art, encounter difficulties in recovering from these losses.

48. The Patent addresses the vulnerability to errors by providing a different approach for signalling reference pictures. The patent suggests specifying the decoded pictures to be used as reference pictures in an absolute and explicit way, instead of a relative or implicit way. In other words: the encoded representation (i.e. the bitstream) for a current picture contains the information about what pictures to use for reference (i.e. reference pictures), independent of the encoded representations of previous pictures.

49. According to the Defendants, the patent relates to the management of reference pictures and the Decoded Picture Buffer (DPB) in video decoding systems. In particular, it concerns the manner in which the reference pictures used to decode subsequent pictures are signalled and managed in video codecs.

50. Paragraph [0030] states that *"The present embodiments do not have these problems of the prior art techniques by using a fundamentally different approach for signalling reference Pictures as compared to the prior art, The present embodiments instead specify Which pictures to be used for reference pictures in an absolute or explicit way instead of a relative or implicit way. Another way to put it is that the encoded representation. i.e. the bitstream. for a current picture contains the information about what pictures to use for reference, i.e. reference pictures, independent of the encoded representations of previous pictures. It can therefore be said that the logical responsibility for maintaining correct decoding picture buffer is moved from the decoder to the bitstream. One way to at it is to say that the information what refence pictures to use for inter prediction and motion vector prediction for a Picture is included in the control information of the picture. Hence, the state of the decoded Picture buffer is signalled for every Picture that is encoded and decoded relative to other pictures.*

51. The Patent describes three approaches of increasing complexity for achieving that objective.

(a) *First approach*: the reference picture identifiers are included in each picture.

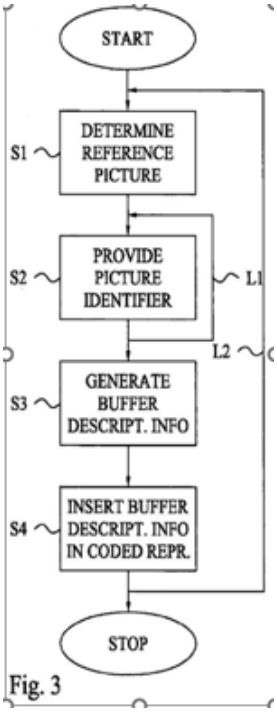


Figure 3 of the patent

52. At step S1, the encoder identifies one (or more) reference pictures to be used as a coding reference (i.e. a reference picture) for a current picture to be encoded;
53. At step S2, the encoder determines the picture identifier for each of the reference pictures identified at step S1;
54. At step S3, the encoder generates the buffer description information (BDI) on the basis of the picture identifiers determined at step S2, which define the reference pictures identified at step S1; and
55. Finally, at step S4, the generated BDI is inserted into an encoded representation of the current picture.

56. The reverse of this method is used to decode an encoded video stream, as shown in Figure 9 of the Patent:

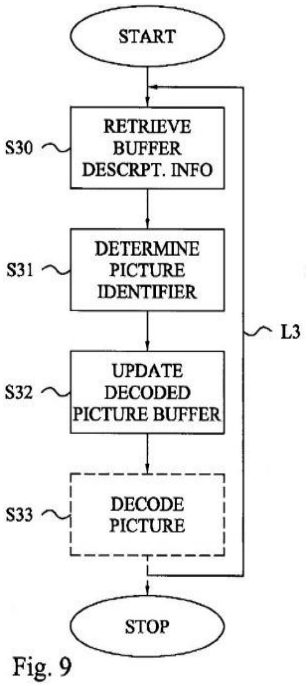


Fig. 9

57. The BDI is retrieved from the encoded representation of a picture (step S30).
58. The BDI is then used to determine the picture identifiers defining the respective reference pictures for the current picture (step S31).
59. The picture identifiers are then used at step S32 to update the DPB so that it comprises the correct reference pictures required for decoding the current picture; and finally, the picture is decoded on the basis of the encoded representation of the picture and the reference pictures stored in the DPB (step S33).

(b) *Second approach*: the BDI may contain information enabling the picture identifiers to be calculated from the value of the current picture identifier, rather than directly containing a list of picture identifiers.
60. This approach reduces the number of bits required for the operation.

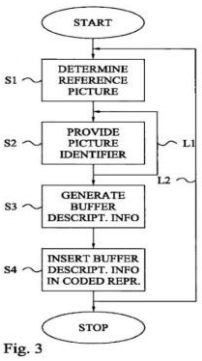


Fig. 3

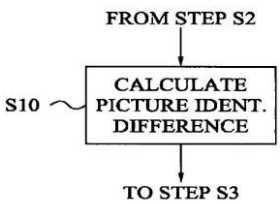


Fig. 6

61. The reverse of this method is performed by the decoder as set out below.

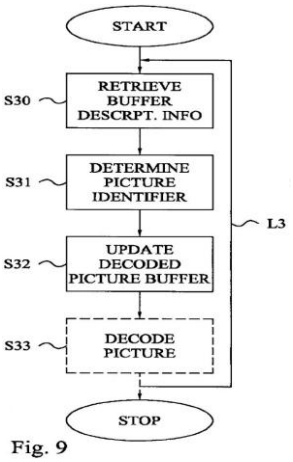


Fig. 9

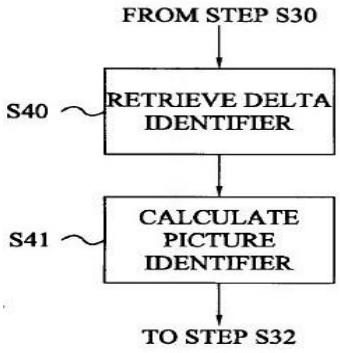


Fig. 10

(c) *Third approach*: Instead of containing the set of reference picture identifiers or delta identifiers, the BDI may constitute a reference to a list of reference picture identifiers (or a list of delta identifiers) communicated in another data structure not included in the encoded representation of the current picture. This is bit-efficient since the BDI need only contain a reference rather than a list of picture identifiers or delta identifiers.

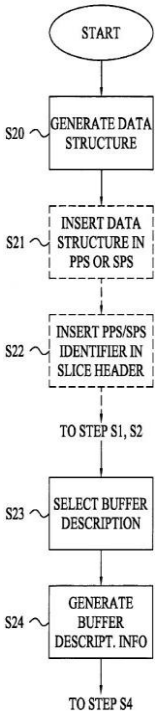


Fig. 7

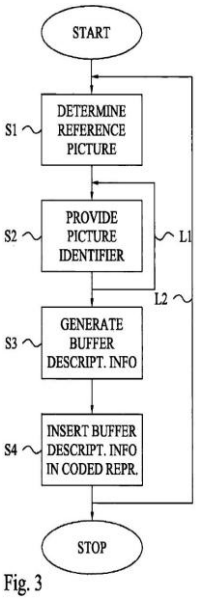


Fig. 3

62. In this case too, the decoder performs the reverse process.

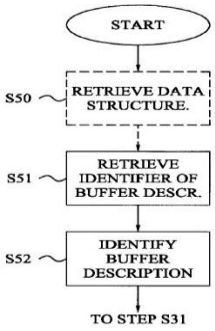


Fig. 11

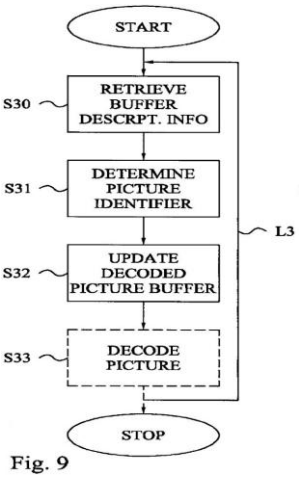


Fig. 9

3.2. The patent claims

63. The Patent comprises seven claims, one independent method claim (claim 1) and two independent product claims (claims 4 and claim 7).

64. Claim 1 of the Patent reads as follows:

1.1 a method of decoding an encoded representation (60) of a picture (10) of a video stream (1) of multiple pictures (10, 40, 42, 50), said method comprising:

1.2 retrieving (S30) buffer description information defining at least one reference picture (40, 42) 5 from a data structure included in said encoded representation (60) of said picture (10);

1.3 determining (S31), based on said buffer description information, at least one picture identifier identifying a reference picture (40, 42) among said at least one reference picture (40, 42) as decoding reference for said picture (10); and

1.4 updating (S32) a decoded picture buffer (530, 650) based on said at least one picture identifier by marking (S70) all reference pictures present in said decoded picture buffer (530, 650) and not being associated with any of said at least one picture identifier determined based on said buffer description information as unused for reference, characterized in that

1.5 said buffer description information defines said at least one reference picture (40,42) in an absolute and explicit way by means of said encoded representation (60) of said picture (10) which contains in said data structure the information about which reference picture to use for reference during decoding, independently of the encoded representation of previous pictures in the video stream.

65. Claim 4 of the Patent reads as follows:

4.1. a decoder (400) configured to decode an encoded representation (60) of a picture (10) of a video stream (1) of multiple pictures (10, 40, 42, 50), said decoder (400) comprises:
4.2. data retriever (410) configured to retrieve buffer description information defining at least one reference picture (40,42) from a data structure in said encoded representation (60) of said picture (10);
4.3. a picture identifier determiner (420) configured to determine, based on said buffer description information, at least one picture identifier identifying a reference picture (40, 42) among said at least one reference picture (40, 42) as decoding reference for said picture (10); and
4.4. a buffer manager (430) configured to update a decoded picture buffer (530) based on said at least one picture identifier by marking all reference pictures present in said decoded picture buffer (530) and not being associated with any of said at least one picture identifier determined based on said buffer description information as unused for reference; characterized in that
4.5. said buffer description information defines said at least one reference picture (40,42) in an absolute and explicit way by means of said encoded representation (60) of said picture (10) which contains in said data structure the information about which reference picture to use for reference during decoding, independently of the encoded representation of previous pictures in the video stream.

4. Claim construction

4.1. General principles

66. According to Article 69 EPC in conjunction with Article 1 of the Protocol on its interpretation, the patent claim is not only the starting point, but the definitive basis for determining the protective scope of a European patent. The interpretation of a patent claim does not depend solely on its exact wording in the linguistic sense. Rather, the description and the drawings must always be taken into account as explanatory aids for the interpretation of the patent claim and not only be used to clarify any ambiguities in the patent claim. However, this does not mean that the patent claim serves only as a guideline and that its scope may extend to what, from a consideration of the description and drawings, the patent proprietor has contemplated. The patent claim is always to be interpreted from the point of view of a person skilled in the art (Court of Appeal, UPC_CoA_1/2024, order of 13 May 2024, App_8/2024 – VisionGroup SA v Hanshow Technology Co. Ltd et al.; UPC_CoA_335/2023, order of 26 February 2024, App_576355/2023 - 10X Genomics and Harvard/Nanostring case; LD Düsseldorf, UPC_CFI_452/2023, order of 9 April 2024, p. 13, GRUR-RS 2024, 7207, para. 49). Additionally, the skilled person is taking the purpose of every patent claim into account, to provide the average person skilled in the art with a technical teaching which, when reworked, leads to the intended success of the invention.

4.2. Person skilled in the art

67. The Defendants submit that the person skilled in the art is a skilled practitioner working in the field of video decoding, with expertise in decoded picture buffer management. The person skilled in the art would hold at least a degree in electronic engineering, computer science or a related field, such as telecommunications, and would have several years of experience and knowledge in the field of digital video signal encoding and decoding, including, in particular, the decoding methods known at the relevant date.

68. Ericsson disputed the Defendants' definition of the "person skilled in the art", on the ground that it attributes an excessively high level of expertise and knowledge to that person. According to Ericsson, the person skilled in the art is an ordinarily skilled practitioner in the field, with a standard educational background (for example, in electronic engineering or computer science) and practical experience in video encoding and decoding, but without inventive capabilities or advanced specialist expertise in decoded picture buffer management or emerging standards such as HEVC.
69. The person skilled in the art would possess only general knowledge of commonly used standards, such as AVC/H.264, and would make use of technical documentation and the relevant specialist literature.

70. The Court considers that the skilled person relevant to the patent in suit typically holds a university degree in electrical engineering with focus on information technology. The skilled person has several years of professional experience in the field of video coding and its standardization, including general knowledge of decoder buffer management. The skilled person has average knowledge and skills, but no advanced inventive capabilities going beyond routine implementation tasks.

4.3. Individual features

71. Claimant did not provide an explicit claim construction with its Statement of Claim. Defendants did provide a claim construction only with the Rejoinder.

72. The Court interprets the Claimant's suggestion in view of the implementation in the HEVC standard as auxiliary means for interpreting the desired meaning of individual features. This is considered appropriate insofar a suggestion the patent and HEVC both relate to state-of-the-art video coding technology at the filing date of the patent. Specifically, regarding the general function of the DPB (Decoded Picture Buffer), the claims are described to contribute to HEVC, the successor of the AVC standard.

73. As regards Feature 1.1 *("A method of decoding an encoded representation (60) of a picture (10) of a video stream (1) of multiple pictures (10, 40, 42, 50), said method comprising*"), the Court observes that decoding a video in accordance with HEVC standard undisputedly forms an example of a method of decoding an encoded representation of a picture of a video stream of multiple pictures. Furthermore, an encoded representation in the sense of feature 1.1 is, for

example, a bitstream as defined in the HEVC standard. Feature 1.1 specifies, in general terms, that the method concerns the decoding of a given picture in a video stream. While the claim primarily refers to decoding a current, i.e. single picture only, in particular with a view to making the decoding of the current picture as robust as possible, the claim contextually assumes that multiple pictures are decoded sequentially, in line with common practice in any video decoding method making use of reference pictures. The summary of the invention in paragraph [0023] states that the embodiments render reference picture management and signalling less vulnerable to errors, since the decoder will need to rely only on the information contained in the current picture for the management of the reference pictures of the current picture, rather than relying on buffer operations having been correctly performed and interpreted in previous pictures. This implies a sequential process of decoding multiple current pictures one after the other.

74. As regards Feature 1.2 ("*retrieving (S30) buffer description information defining at least one reference picture (40, 42) from a data structure included in said encoded representation (60) of said picture (10)*"), the Court notes that, according to the Patent, buffer description information is, e.g. a data structure, such as a general table with absolute information of which pictures to be used for reference pictures, i.e. stored in a decoded picture buffer (also referred to as a reference picture buffer) to be used for subsequent coding (cf. [0031] of the Patent). Furthermore, according to the Patent (cf. [0045]), the buffer description information can be regarded as information identifying a buffer description that is a set of reference pictures associated with a current picture. It consists of all reference pictures that are prior to the current picture in decoding order and that may be used for inter prediction of the current picture or any picture following the current picture in decoding order.

75. As regards Feature 1.3 ("*determining (S31), based on said buffer description information, at least one picture identifier identifying a reference picture (40, 42) among said at least one reference picture (40, 42) as decoding reference for said picture (10)*"), the Court observes that the at least one picture identifier of Feature 1.3 is supposed to identify a reference picture as a decoding reference for said picture, i.e., the current picture from Features 1.2 and 1.1. Said picture is considered to be a single picture that is currently foreseen for decoding, wherein the at least one picture identifier identifies one or more reference pictures for decoding at least this picture. Although the buffer description can contain reference pictures for decoding pictures following the current picture (cf. [0045], claim 3), the at least one picture identifier determined per feature 1.3 clearly captures one or more reference pictures for decoding at least the current picture, which excludes reference pictures for only decoding subsequent pictures. To this end, the Court essentially follows the view of the Defendant. This understanding is emphasized by the wording of the claim by referring to a reference picture among said at least one reference picture, which is in line with the understanding that the buffer description information can generally identify also reference pictures for subsequent pictures only.

76. The arguments of the Claimant at the oral hearing do not change this view. While the Court agrees with Claimant that claim 3 and corresponding parts of the description can generally be taken into account for claim construction of claim 1 despite not being asserted in these proceedings, claim 3 only emphasizes a clear distinction between reference pictures for decoding the current picture versus a subsequent picture. The fact that claim 3 mentions both categories as and-combination cannot lead to the conclusion that the first category included in claim 1 (decoding reference for current picture) should be understood to electively also mean the second category only (decoding reference for subsequent picture). The term “at least” in Feature 1.3 can thus not be used to extend the understanding of the feature to something beyond or against the literal meaning of the feature. On the other hand, Feature 1.3 does not exclude that reference pictures for the current pictures may be reused for subsequent pictures.

77. As regards Feature 1.4 (“*updating (S32) a decoded picture buffer (530, 650) based on said at least one picture identifier by marking (S70) all reference pictures present in said decoded picture buffer (530, 650) and not being associated with any of said at least one picture identifier determined based on said buffer description information as unused for reference, characterized in that*”), the Court observes that the updating step of feature 1.4 is based on said at least one picture identifier, which has been determined according to feature 1.3. Thus, the updating step is based on the reference pictures identifier(s) for decoding at least the current picture. As a consequence, the marking depends on a distinction between (i) reference pictures for decoding at least the current picture and (ii) other reference pictures for decoding a subsequent picture. This means that all reference pictures in the DPB, which are not identified as reference pictures for decoding at least the current picture, are marked as unused for reference. This understanding, essentially following Defendant’s view, is supported by the patent description including several distinguishable embodiments in view of determining picture identifiers and the marking scheme. In one group of embodiments, the marking step is based on the buffer description information as such (see, e.g., para. [0134]). This is understood to the extent that the marking refers to all picture identifiers in the buffer description and not to specific picture identifiers included therein. In the same way para. [0196] of the ANNEX embodiment of the patent mentions that all reference pictures (in the decoded picture buffer) that are not a part of the buffer description are marked as "unused for reference". In contrast, the patent also envisages another group of embodiments, wherein the marking is based on at least one picture identifier from the buffer description information, thereby implying a selection from all identifiers from the buffer description information (see, e.g., [0178]). Following this aspect further, the description teaches that two different types of picture identifiers can be determined from the buffer description information, namely i) at least one picture identifier identifying a respective reference picture as decoding reference for the picture and ii) at least one picture identifier identifying a respective reference picture as decoding reference for a subsequent, according to a decoding order, picture of the video stream (see para. [0099]). The same distinction can be inferred from para. [0144], [0147], and [0168]. The description further teaches to update the decoded picture buffer to comprise the respective reference picture identified by the at least one picture identifier

determined in the previous step (para. [0100]). The skilled person thus learns from the patent that the determination of at least one picture identifier from the buffer description information prior to updating the DPB must not necessarily relate to determining any variable number of picture identifiers but can relate to a specific subset from all identifiers in the buffer description information. Given this specific possibility of distinction between the picture identifiers included in the buffer description information, the at least one picture identifier determined per feature 1.3, and used for marking per feature 1.4, identifies one or more reference picture as decoding reference for at least the current picture.

78. As regards Feature 1.5 ("*said buffer description information defines said at least one reference picture (40,42) in an absolute and explicit way by means of said encoded representation (60) of said picture (10) which contains in said data structure the information about which reference picture to use for reference during decoding, independently of the encoded representation of previous pictures in the video stream*") the Court essentially follows the Defendant in that the terms "absolute and explicit" are interpreted as counterpart to the previous identification method in the prior art, in particular H.264/AVC, namely implicit and relative identification (see para. [0022] of the patent). In particular, the buffer description explicitly signals the at least one picture identifier, e.g., in the form of delta identifier or explicit picture identifiers (para. [0155]). The patent (para. [133]) mentions as examples that the buffer description contains delta_POC, temporal_id and additional_picture_id of all reference pictures in the decoded picture buffer in order to provide an absolute reference to the pictures to be used as reference pictures. The delta_POC is used to calculate the POC of a reference picture as POC(ref) = POC(current) + delta_POC. Pictures can be identified by the pair POC and additional_picture_id. Temporal_id can be included in the buffer description to enable correct reference picture list modification in the case of lost or removed pictures, e.g. temporal scalability [0133]. The subfeature "independently of the encoded representation of previous pictures in the video stream" is understood as clarification of the meaning "absolute" in the meaning of the patent.

As regards the other claims

79. Claim 2 comprises as an additional feature that updating (S32) said decoded picture buffer (530, 650) comprises updating (S32) said decoded picture buffer (530,650) to comprise said respective reference picture (40, 42) identified by said at least one picture identifier.

80. The patent envisages the updating step S32 as a means for removing availability of reference pictures in the DPB, which are not included in the buffer description, either by removing these pictures or marking as "unused for reference" or "unused for prediction", see. para. [0115], [0116]. Those pictures, which are not made unavailable through marking, i.e. pictures included in the buffer description, are kept, for example by marking as used for reference, see para. [0117].

81. Considering the distinction made by the marking step of feature 1.4, and taking into account the technical function associated with this step as described in the patent, the skilled person understands the updating step as further defined in claim 2 in the sense that the updating is

carried out in such a way that the DPB still comprises the reference picture identified by said at least one picture identifier after the updating.

82. Regarding decoder claims 4 and 5, the interpretation laid out above with respect to claims 1 and 2 applies correspondingly to the decoder claims 4 and 5, respectively.

5. Validity

5.1. General remarks

83. The Defendants challenge claim 1 for lack of novelty and inventive step in view of published US patent application "Mulroy" (= US 2009/0052531 A1, Exhibit ASU-342-F1).
84. The patent application was filed on 27 February 2007 and published on 26 February 2009, thus before the earliest priority date of the Patent (30 June 2011). It therefore forms prior art according to Article 54 (2) EPC.
85. Mulroy relates generally to video coding. More particularly, aspects of the disclosure concern video encoders employing inter-frame differential coding. The general coding structure context of Mulroy is based on H.264, i.e. AVC.
86. Lack of patentability is also alleged in respect of independent claims 4 and 7 and dependent claims 2, 3, 5 and 6 of the patent in suit. The Claimant disputes this position and submits that all claims are novel and involve an inventive step over Mulroy.
87. According to the Defendants, Mulroy addresses the same technical problem, namely the desynchronisation between the encoder buffer and the decoder buffer in the event of loss of MMCO commands. Furthermore, Mulroy allegedly proposes the same solution: signalling in each slice which reference pictures are to be present in the DPB.
88. The parties' more detailed respective positions and the Court's assessment are examined below.

5.2. Lack of novelty

Defendants' position

89. According to the Defendants, Mulroy anticipates the claimed subject matter and therefore deprives it of novelty for the following reasons. Mulroy addresses the same technical problem discussed in the patent in suit in paragraph [0010]: the loss of MMCO commands and the resulting loss of synchronization between the encoder buffer and the decoder buffer. Mulroy teaches the same general solution described in paragraph [0030] of the patent: explicitly indicating to the decoder which reference frames must be present in the DPB. This solution is achieved by including, in each segment, remapping instructions that explicitly identify the frames to be retained in the DPB.
90. More specifically, first, Mulroy describes a video transmission system comprising, inter alia, a real-time encoder and decoder operating within the existing AVC/H.264 standard architecture and connected to each other via a network connection (see paragraphs [0008]–[0015]):

the encoder receives the video signal, encodes it and transmits it; the decoder receives the bitstream, decodes it and produces the output video to be delivered to the user (Figure 1).
91. The encoder comprises an internal decoding block (Figure 2A) used to reconstruct the frames after encoding and to use them as reference pictures for encoding subsequent frames. The decoder likewise contains a decoding block identical to that of the encoder (paragraph 18).
92. Figure 3 describes how the encoder works. It consists of the following steps: receiving the frame, selecting the reference pictures, encoding, transmission, internally decoding the newly encoded frame, checking the available space in the buffer, where necessary deleting an existing frame, and storing the new frame in the buffer. In this way, the encoder updates its set of reference pictures.
93. Further, Mulroy clarifies that the transmitted information comprises the reference-picture identifiers required by the decoder to perform the decoding correctly. The AVC standard explains that this information is typically processed using the reference picture list, the sliding-window process and MMCO commands: these commands synchronise the contents of the decoder's DPB with those of the encoder.
94. Paragraph [0025] of Mulroy teaches that if the encoder removes a reference picture from its buffer, an MMCO command is sent instructing the decoder to perform the same operation. However, if these commands are lost during transmission, this results in a discrepancy between the encoder buffer and the decoder buffer, see para. [0027]. The Patent identifies the same issue in paragraphs [0010] and [0028].
95. To overcome this problem, Mulroy explains how to use the conventional commands for reordering the list of reference pictures differently. Rather than merely reordering the reference pictures, these commands are inserted into each slice so as to provide the decoder with the complete set of pictures that should be contained in the buffer at the relevant time, see [0027]. Consequently, each slice explicitly specifies the correct contents of the DPB. Based on this information, the decoder is able to determine which pictures should be retained and which should be removed from the DPB. The defendants argue that this is the same teaching as that of the claimed solution in the patent, which likewise teaches the explicit identification of reference images using Buffer Description Information (BDI).
96. Against that background, the Defendants submit that Mulroy anticipates claim 1 of EP '342 for the following reasons.
97. With regard to feature 1.1, Mulroy also teaches a method of decoding an encoded representation of pictures forming part of a video stream. The decoder receives the encoded frames and decodes them, in accordance with feature 1.1.
98. Regarding feature 1.2 (which, it is recalled, concerns the retrieval of buffer description information), it is anticipated by the remapping instructions included in each slice (NAL unit). These remapping instructions describe which frames are to be contained in the decoder buffer and correspond to the Buffer Description Information (BDI) of the Patent.
99. With regard to feature 1.3, Mulroy also discloses the identification of reference-picture identifiers. The remapping instructions establish an explicit mapping between frame numbers

and positions in the reference list. This enables the decoder to directly identify the pictures to be used for decoding. The frame numbers correspond to the picture identifiers of claim 1.
100. Regarding feature 1.4 (concerning the updating of the DPB), Mulroy teaches how to use a decoder that employs remapping instructions to determine which frame should be removed from the buffer. Furthermore, in paragraph [0025], Mulroy refers to the MMCO commands of the AVC standard for frame deletion. Given that the AVC standard explains that a frame can be removed from the DPB only after it has been marked as "unused for reference purposes," a person skilled in the art would understand that the operation described by Mulroy corresponds to the step set forth in claim EP '342, which provides that all frames not included in the set of reference frames are marked as unused for reference purposes, thereby updating the buffer.
101. With regard to feature 1.5, Mulroy describes that the remapping instructions expressly specify, using frame numbers, which pictures must be present in the decoder buffer at any given time [0027]. This operation, as described in Mulroy, is independent of the content of the preceding pictures.
102. For ease of understanding, the Defendants also provide, in the Statement of Defence, a comparative table in which they state that:
- the buffer description of the Patent corresponds to Mulroy's remapping instructions;
- the picture identifiers correspond to Mulroy's frame numbers;
- in both cases, the data structure is the header of a VCL NAL unit.

103. As regards claim 2, the Defendants submit that it adds no substantive technical feature to claim 1.
104. As regards dependent claim 3, it requires the identification of reference pictures also for subsequent pictures. In that regard, paragraph [0020] of Mulroy states that prediction may use previously or subsequently decoded pictures.
105. That solution therefore necessarily encompasses pictures serving as references for future pictures and thus also anticipates claim 3. The same considerations apply to claim 6.
106. Product claims 4 and 5 concern a decoder implementing the methods of claims 1 and 2. They also lack novelty or, at the very least, inventive step.
107. Claim 7, directed to a receiver comprising an input section, a decoder and an output section, is likewise said to be anticipated by Figure 1 of Mulroy. More specifically, the RTP/H.264 Receiver is said to correspond to the input section, the H.264 Decoder to the decoder, and the Renderer to the output section.

Claimant's position
108. The Claimant, for its part, submitted that Mulroy does not disclose features 1.4 and 1.5 of claim 1, relying in that regard on paragraphs [0026–0029] of Mulroy.
109. Ericsson agrees with the Defendants that Mulroy resolves the problem arising from the loss of MMCO commands, which can lead to a discrepancy between the encoder buffer and the decoder buffer (para. [0027]). However, according to Ericsson, Mulroy teaches the use of remapping instructions solely in the context of error recovery mechanisms and not as a substitute for the MMCO process. In this regard, the patent holder refers to paragraph [0029], which states

that remapping instructions can be used to recover from the error caused by the discrepancy between the encoder and decoder buffers, by identifying which frame should be removed from the buffer in the event that a deletion message has been lost.

> **[0029]** Thus we see that these remapping instructions are used by error recovery means operable to receive further messages from a coder, the further messages specifying which pictures should be in the store, and arranged in the event that a decoded picture is to be stored and a deletion message has not been received, to select a picture to be deleted from the store by reference to one of the further messages. Alternatively, the decoder could be fitted with error

110. In summary, the remapping instructions correspond to the operation of modifying the list of reference frames described in Section 8.2.4.3 of the H.264/AVC standard: These have the sole aim of reordering those lists. They do not, however, perform the reference picture marking operation, which under the H.264/AVC standard is performed exclusively by MMCO commands.

111. According to Ericsson's defence, therefore, the Mulroy does not disclose feature 1.4 of the patent in suit as it does not teach that all frames not associated with the transmitted frame identifiers should be marked as '*unused for reference"*. Mulroy merely selects the frames to be deleted as part of error recovery procedures. Ericsson's submission is, in essence, that deleting a picture is not equivalent to marking it as "*unused for reference*" (see also the statement of Dr Richardson, paragraphs 28–29, Exhibit E03). In that regard, the Claimant relies on paragraph [0026] of Mulroy *"MMCO commands can be used to remove a short- or long-term picture from the buffer*", and para. [0027]: *"…which frames should be in the decoder buffer at that time", and "These remapping instructions can be made use of in the present context for indicating to the decoder which frames (by their frame numbers) should be in its buffer.*". Para. [0028] of Mulroy also confirms that the proposal of Mulroy is to delete frames from the buffer: *"and for the decoder to use these to determine which frame to remove from its buffer when it otherwise does not have the required knowledge",* wherein Para. [0029] suggests "*to select a picture to be deleted from the store by reference to one of the further messages".*

112. In particular, a short-term reference picture marked as "unused for reference" may subsequently be removed from the database only if the conditions laid down in Section C.2.3 of the H.264/AVC standard are satisfied:

(i) it has been marked as "unused for reference", or it is a non-reference picture; and

(ii) it is marked as non-existing, or has an OutputFlag equal to 0, or its output time precedes that of the current picture.

113. In that regard, Claimant argues that the inventor, Dr MULROY (see defendants' Exhibit WKS-T3), is mistaken in stating that removing a picture from the buffer is equivalent to marking it as "unused for reference". On the contrary, under Section C.2.3 of the H.264/AVC standard, both conditions set out in points (i) and (ii) must be satisfied before a picture may be removed from the database.

114. In short, Ericsson argues that the prior art document Mulroy does not teach updating the pictures in the database in relation to those marked as "unused for reference". The marking of reference pictures is performed by the MMCO commands. Mulroy does not disclose any picture-marking operation as required by feature 1.4 of the Patent, in particular in connection with the remapping instructions.
115. Secondly, Mulroy does not disclose feature 1.5 because the remapping instructions do not identify at least one reference picture in an absolute manner.
116. According to the prior art, the discrepancy between the encoder and decoder buffers—for example, where the decoder has failed to receive a series of MMCO commands (see paragraph [0027])—is addressed by the *remapping instructions, which indicate to the decoder which frames (by their frame numbers) should be present in its buffer*. Indeed, as stated in paragraph [0028], the remapping instructions refer to all frames present in the encoder buffer. Upon receiving that information, the decoder establishes that the number of frames to which it refers is lower than the number currently present in its own database, because the decoder did not receive the MMCO command that would have removed the specific frame concerned.
117. Accordingly, the remapping instructions do not define the abovementioned at least one reference picture in an absolute and explicit manner; they merely provide a means of detecting a discrepancy between the contents of the encoder and decoder buffers. It is instead the MMCO process that is responsible for reference-picture marking. This is confirmed by paragraph [0029] of Mulroy.

Court's assessment
118. The Court finds that Mulroy discloses a new use of the remapping instructions (reference picture list reordering) already defined in AVC. Mulroy proposes inserting remapping instructions as further messages in every slice to indicate to the decoder all pictures (frames) that should be in the decoded buffer/store (i.e. the DPB). In the event that a decoded picture is to be stored and a deletion message has not been received, the decoder selects a picture to be deleted from the store by reference to one of the further messages.
119. From this understanding, the remapping instructions are interpreted as proving means to delete a frame from the buffer, contrary to the argument of the Claimant. However, Mulroy does not disclose using the remapping instructions in such a way that *all* reference pictures not included therein are marked as unused for reference.
120. First, Mulroy teaches that a picture is selected in response to the storage need for a decoded picture. It is not described how this selection is made exactly depending on a current storage need. Hence, the teaching of Mulroy is broader than feature 1.4. An unambiguous disclosure of feature 1.4 would at least require a specific selection to the extent that all pictures not indicated in the remapping instructions are selected for deletion.
121. Second, it is not unambiguously disclosed in Mulroy whether the remapping instructions should represent reference picture identifiers for at least the current picture, or whether they refer to reference pictures per se. Mulroy does not make a distinction between reference pictures for the current picture and other pictures. While it may be inferred from the AVC standard

(clause 7.4.3.1 para. 1) that the reference picture list reordering is used for decoding the slice and may thus refer to the current picture, such understanding cannot be implicitly assumed for the new use of signalling reference pictures to be included in the buffer.
122. Third, it is also questionable whether the "picture selection for deletion" of Mulroy can be unambiguously equated to "marking as unused for reference", even when taking into account the AVC standard and the MMCO commands described therein. While it might be true that deletion of pictures from the buffer involves marking as unused for reference according to the AVC standard, Mulroy does not unambiguously disclose this concept to be applicable in the same way also in the context of selecting a picture to be deleted when signalled by the re-mapping instructions.
123. Therefore, as Mulroy does not disclose feature 1.4, the subject matter of claim 1 is novel over Mulroy. For the same reasons, mutatis mutandis, claims 2, 4, and 5 are also novel over Mulroy.

5.3. Lack of inventive step

5.3.1. Claim 1

Defendants' position

124. The Defendants submit that feature 1.4 would at least have been obvious to the person skilled in the art and that feature 1.5 would likewise have been obvious to the person skilled in the art.
125. At the oral hearing, the Defendants also addressed the alleged lack of inventive step and referred to UPC case law of the Court of Appeal, namely Amgen v Sanofi, UPC_CoA_528/2024 UPC_CoA_529/2024, decision of 25 November 2025 and Meril v Edwards, UPC_CoA_464/2024 et al, decision of 25 November 2025. These decisions were not available at the time of filing the Statement of Defence, but they can nevertheless be applied now to the present case. Defendants argued that Mulroy is a realistic starting point for inventive step because it addresses the same technical problem and also lies in the same technical field as the patent in suit. In light of pointers disclosed in Mulroy (para. [0038]) and the desired deletion of reference pictures from a full DPB (para. [0047] and [0048]) the skilled person would have implemented the marking step in accordance with feature 1.4 as a matter of routine. While parts of Mulroy are described in connection to the encoder only, this does not mean that the skilled person would ignore this part for decoding. In any case, according to the UPC case law of the Court of Appeal, a pointer would even not be necessarily required to arrive at the subject matter of the claim.

Claimant's position

126. According to Ericsson, the person skilled in the art would not, without exercising inventive skill, modify Mulroy's disclosure so as to arrive at the invention as defined in claim 1 of the Patent.
127. A person skilled in the art considering Mulroy and the H.264/AVC standard would be aware of two points: MMCO commands are used for *reference picture marking*, whereas the

remapping instructions may be used in an error-recovery process to select a picture for deletion from the buffer.

128. Against that background, there would be no reason for the person skilled in the art to implement the missing features 1.4 and 1.5 in the *remapping instructions* disclosed in the prior art at issue. Mulroy addresses the situation in which the loss of an MMCO command may be remedied by *error-recovery means* using the *remapping instructions*. That solution proceeds in a materially different direction from that prescribed by the Patent.

129. The prior art teaches that the *reference picture marking* process should be improved. The Patent-in-suit does not address the situation in which error-recovery means are used to identify discrepancies between the encoder and decoder buffers.

130. The missing features 1.4 and 1.5, in combination with all the other features, concern a different approach to reference-picture signalling. More specifically, instead of using MMCO commands, the Patent requires buffer description information defining at least one reference picture, retrieved from a data structure included in the encoded representation of the picture (feature 1.2); at least one picture identifier to be determined on the basis of that buffer description information (feature 1.3); and the decoded picture buffer to be updated on the basis of that at least one picture identifier by marking as "*unused for reference*" all reference pictures present in the decoded picture buffer and not associated with any of the at least one picture identifiers determined on the basis of the buffer description information (feature 1.4), the buffer description information defining that at least one reference picture in an absolute and explicit manner (feature 1.5).

131. In other words, the encoded representation (i.e. the bitstream) of a current picture contains information identifying the pictures to be used as reference pictures, independently of the encoded representations of previous pictures.

132. The claimed solution therefore involves an inventive step over the cited prior art.

133. During the oral hearing, Defendants pointed out that para. [0038] of Mulroy does not form disclosure relevant for forming a reference picture set according to the claim, thus also not forming a pointer towards the claimed invention. Furthermore, para. [0048] of Mulroy is regarded as a negative pointer.

Court's assessment

134. In assessing inventive step, the following are taken into consideration:

- Article 138(1)(a), 52 and 56 of the European Patent Convention (EPC);
- the relevant UPC case law including the two decisions of the Court of Appeal referenced by Defendants, i.e. decisions of 25 November 2025 (UPC_CoA_528/2024, 529/2024 – Amgen v. Sanofi-Aventis and UPC_CoA_464/2024, 457/2024, 458/2024, 530/2024, 532/2024, 533/2024, 2/2025, 27/2025 – Meril v. Edwards). Subsequent decisions of the Courts of First Instance are also of relevance (see Local Division Munich, decision of 12 December 2025, UPC_CFI_146/2024 - UPC_CFI_496/2024 UPC_CFI_147/2024 - UPC_CFI_374/2024 UPC_CFI_148/2024 - UPC_CFI_503/2024, Milan Local Division, decision of 21 April 2026, UPC_CFI_472/2024).

135. Both of the mentioned decisions of the Court of Appeal were delivered after the closure of the written procedure. At the oral hearing, the parties addressed the approach adopted by the Court of Appeal and the subsequent case law. Accordingly, in that regard, the principle of adversarial proceedings has been duly observed.
136. The Court interprets the Defendants' arguments in view of inventive step as auxiliary arguments, which only selectively address certain features but not the claim as a whole. For example, the arguments related to feature 1.4 focus primarily on the aspect that the skilled person would implement "a selection for deletion" as disclosed in Mulroy by marking the selected picture as unused for reference.
137. Against this background, the Court finds the arguments presented by Defendants to be incomplete. Specifically, the Court already does not see a sufficient pointer in Mulroy to select all pictures not included in the remapping instructions to be deleted from the buffer. Rather, Mulroy teaches an unspecified selection of a picture among the pictures outside the reorder list in the specific event that a decoded picture is to be stored in the buffer and a deletion message has not been received (para. [0029]). This teaching guides the skilled person to a selective error recovery means in parallel to the usage of MMCO commands. In this context, it is not obvious for the skilled person to consider a modification to the extent that all reference pictures not included in the remapping instructions are to be selected for deletion, let alone that they are marked as unused for reference. Furthermore, the skilled person would not necessarily use the remapping instructions to indicate reference pictures for at least the current picture without specific prompt.
138. Overall, the disclosure of Mulroy remains too broad in view of the specific teaching of claim 1. In this context, the Court also considers that the room for routine modifications or implementations in video coding technology is usually limited for the average skilled person given the significant complexity and the regulation of pre-existing standards, thereby reducing the freedom of the skilled person.
139. Therefore, the subject matter of claim 1 is based on an inventive step in view of Mulroy.

5.3.2. Remaining claims

Defendants' position

140. The Defendants submit that, in the light of Mulroy, claims 2, 3, 4 5, 6 and 7, in addition to lacking novelty, also lack an inventive step.

Claimant's position

141. Ericsson submits that all the remaining claims, by reference to claim 1, are novel and involve an inventive step in view of Mulroy, pointing out that claim 4 is directed to a decoder implementing the method of claim 1, and that all remaining claims are dependent on either claim 1 or claim 4.

Court's assessment

142. The Court follows the Claimant and finds that the subject matter of claim 4 is formulated as a decoder claim but otherwise corresponds to the subject matter of claim 1. Therefore, the arguments regarding patentability of the subject matter of claim 1 apply correspondingly to claim 4, which is also novel and based on an inventive step in view of Mulroy.
143. The subject matter of remaining claims 2, 3, 5, 6 and 7 are likewise patentable since they include the features of either of claim 1 or claim 4.

6. Essentiality of the patent

144. Ericsson's first request is for the Court to declare that the patent in suit is essential to the HEVC/H.265 standard in its most recent version of 23 September 2023.

Defendants' position

145. The Defendants objected that the statutory provisions governing the jurisdiction of the UPCA do not grant the Court the authority to issue declarations of essentiality. In particular, Articles 32 and 64 of the UPCA do not provide for such remedies. Furthermore, such a declaration of essentiality would lack legal certainty for two reasons:

(i) Ericsson did not clarify for which version of the HEVC Standard the declaration is requested;
(ii) Ericsson did not clarify if such a declaration of essentiality would have binding effect in relation to third parties. If the declaration would have a binding effect in relation to third parties, the Defendants consider this "clearly undesirable".

146. The Defendants therefore requested that that claim be dismissed.

Claimant's position

147. According to Ericsson, the Defendants' contention that the UPC lacks jurisdiction to issue such a declaration of essentiality is unfounded.
148. In particular:

- Article 56(1) UPCA provides that the Court "may impose such measures, procedures and remedies as are laid down in this Agreement";
- Article 64(1) UPCA further clarifies the meaning of the term "measures", providing that the Court "may order, at the request of the applicant, appropriate measures";
- Article 64(2) UPCA also contains a list of measures falling within the concept of "appropriate measures". That list, however, is not presented as exhaustive.

149. The Court therefore has jurisdiction to issue a declaration of essentiality.
150. As regards the Defendants' objection that a declaration of essentiality would lack the requisite legal certainty, Ericsson submitted, to the contrary, that:

(i) as regards the version of the HEVC standard in respect of which the declaration is sought, Ericsson clarified that the relevant standard is HEVC/H.265, specifically its most recent version, namely the September 2023 version;

(ii) the Defendants further contended that Ericsson had not clarified whether such a declaration of essentiality would have binding effect vis-à-vis third parties.

151. As regards the second point, it is irrelevant. A declaration made in the present proceedings is final, conclusive and binding as between the parties to those proceedings.

Court's assessment

152. The Court observes, as a preliminary point, that the Defendants did not lodge a preliminary objection pursuant to R. 19 RoP challenging the UPC's jurisdiction in respect of this claim.

153. However, that does not relieve the Court of its duty to examine the issue of its own motion, since such examination is not precluded by R. 19.7 RoP. Indeed, "due to the primacy of Union law, the objections against international jurisdiction are not precluded by R. 19.7 RoP." (See UPC_CFI_159/2024, Mannheim Local Division, decision of 2 October 2025, para. 32; UPC_CFI_162/2024, Mannheim Local Division, decision of 11 March 2025, para. 48).

154. Indeed:

- Article 32 of UPCA confers jurisdiction on the Court, *inter alia*, in respect of actions for actual or threatened infringement, actions for declarations of non-infringement and revocation actions;
- the UPC has no general and abstract jurisdiction to "certify" that a patent is standard-essential vis-à-vis the relevant standard-setting organisation or the market as a whole;
- neither Article 56 UPCA nor Article 64 UPCA, which concern corrective measures rather than international jurisdiction and competence regulated according to Chapter VI, support Ericsson's position;
- according to the Court of Justice of EU, where the defendant unequivocally challenges, in its first defence, the jurisdiction of the court seized, the prorogation of jurisdiction provided for in the first sentence of Article 24 of Regulation No 44/2001—now Article 26 of Regulation (EU) No 1215/2012—is precluded. It is irrelevant whether or not that challenge is the sole subject matter of that first defence (see paragraph 34 of the judgment of the Court of Justice of the European Union of 13 July 2017 in Case C-433/16, Bayerische Motoren Werke AG v Acacia Srl);
- this approach has recently been clarified by the Court of Appeal of the UPC in case UPC_CoA_420/2025, which addressed the interplay between Article 26 of Regulation (EU) No 1215/2012 and R. 19.7 RoP;
- the Court of Appeal held, in particular, that an objection to international jurisdiction raised by a defendant remains effective even if it is not brought within the time limit prescribed by the RoP for lodging a preliminary objection. The Court emphasised that Regulation (EU) No 1215/2012, as a superior source of EU law, prevails over the internal procedural rules of the Unified Patent Court;
- accordingly, a defendant's right to contest international jurisdiction remains protected, provided that the objection is clearly raised in its first statement of defence. In such circumstances, the defendant cannot be deemed to have accepted the Court's jurisdiction by

appearance, notwithstanding the presumption of submission that might otherwise arise under R. 19.7 RoP;
- moreover, a principal declaration, with erga omnes effect, that the Patent implements a standard would give rise to issues concerning the right to be heard of the international standard-setting organisation concerned;
- accordingly, where such a specific claim is brought before it, the UPC must declare, of its own motion if necessary, that it lacks jurisdiction *ratione materiae.*

155. The UPC does, however, have jurisdiction to determine, as an incidental issue, whether a patent is essential to a standard where and only as far as such determination is necessary, particularly for deciding on infringement as requested by the parties.

156. In other words, the UPC—like any other court of a Member State of the European Union—may determine, as an issue relevant to an action for infringement or for a declaration of non-infringement, whether implementation of a specific standard necessarily entails implementation of the asserted claims of a European patent or a European patent and, consequently, whether that patent must to this extent be regarded as essential to that standard.

7. Infringement

7.1. Preliminary objection by Arvato

157. Arvato lodged a preliminary objection, challenging the competence of the Milan Local Division alone.

158. The Defendants submitted, *inter alia*, that:
- it does not carry out in Italy any of the activities referred to in Articles 25 and 26 UPCA but provides storage and logistics services only;
- more specifically, Arvato disputed that (i) it is an intermediary whose services are used (ii) by a third party to infringe a patent within the meaning of Article 63(1) UPCA. It argued that there was no allegation that Arvato's services were used by a third party to infringe patent EP'342; the only party alleged to have committed an infringement was ASUSTeK;
- even if it were to be regarded as an intermediary, Arvato should have been sued before the court of its domicile (The Hague Local Division), where the services are provided and where the company has its registered office;
- its limited involvement in the supply chain when a customer purchases ASUS products from www.asus.com/it. Its activities are allegedly limited to storing the goods in its warehouse in the Netherlands prior to purchase and subsequently arranging for other carriers (such as UPS) to collect the goods from that warehouse and deliver them from the warehouse in the Netherlands to the customer in Italy. In the course of that operation, Arvato may see only cardboard boxes containing products and plays no part in the commercial transactions concerning the contents of those boxes. More specifically, Arvato neither opens nor is authorised to open the boxes without the customer's permission. Nor does Arvato have the expertise, knowledge, control or possession of the products that it stores

on behalf of its customers necessary to assess or verify whether those products (or their components) infringe third-party intellectual property rights. Furthermore, title to the goods does not pass to Arvato at any stage;
- it does not place the allegedly infringing products on the Italian market;
- in that regard, the Defendant also relied on the judgment of the Court of Justice of the European Union (CJEU) of 2 April 2020 in Case C-567/18, *Coty*, according to which, in a trade mark infringement case, a person who, on behalf of a third party, stores goods which infringe trade mark rights without being aware of that infringement must be regarded as not storing those goods for the purpose of offering them or putting them on the market where it is not that person, but rather the third party alone, who intends to offer the goods or put them on the market;
- the *forum commissi delicti* under Article 33(1)(a) UPCA (pursuant to which actions are to be brought before the local division hosted by the Contracting Member State where the actual or threatened infringement has occurred or may occur, or before the regional division in which that Contracting Member State participates) does not, in its submission, encompass claims based on Article 63(1) UPCA—which provides for an injunction against an intermediary whose services are used by a third party to infringe a patent—but only infringements under Articles 25 and 26 UPCA;
- in any event, the intermediary's activities did not fall within the scope of Article 33(1)(a) UPCA, since they did not constitute an actual or threatened infringement. The only applicable criterion was therefore that laid down in Article 33(1)(b) UPCA, which is linked to the principal place of business and thus confers internal competence on The Hague Local Division.

159. On 13 September 2024, Ericsson filed its response to Arvato's preliminary objection, together with a separate application for leave to amend the claim.

160. In response to the preliminary objection, Ericsson submitted, *inter alia*, that:
- the Defendants, *individually and jointly*, were committing acts of infringement. In the alternative, it relied on Article 33(1)(a) and Article 33(1)(b) UPCA;
- Arvato's preliminary objection essentially constituted a defence on the merits, since it denied being an intermediary and sought a determination of that issue on the merits, to be decided by the Court together with the substance of the action. In that regard, Ericsson reiterated that, according to the Court of Justice, although a court may examine its jurisdiction in the light of all the information available to it, including the defendant's submissions, it is not expressly required, for the purpose of determining jurisdiction, "*to conduct a comprehensive taking of evidence in relation to disputed facts that are relevant for both the question of jurisdiction and to the existence of the claim"* Case C-375/13, *Kolassa*, paragraph 65 (not verifiable: only the operative part is available in the database);
- the same principle was said to have been reiterated by the UPC Court of Appeal (No 188/2024, order of 3 September 2024, paragraphs 12 and 25–27).

- Article 63(1) UPCA corresponded to Article 11 of Directive 2004/48/EC on the enforcement of intellectual property rights and had a counterpart in Article 8(3) of Directive 2001/29/EC on copyright. Ericsson drew attention to the difference in wording between Article 62 ("an intermediary whose services are being used by the alleged infringer") and Article 63 ("an intermediary whose services are used by a third party to infringe a patent").
- an "intermediary" means *"any person who carries a third party's infringement of a protected work or other subject matter in a network" (*Case C-314/12, *Telekabel*, paragraph 30);
- an injunction may be issued against intermediaries irrespective of their (potential) liability.

161. By its application under R. 263 RoP, Ericsson unconditionally separated out its claim for a permanent injunction against Arvato. It requested that the Court prohibit Arvato only from providing storage, shipping and/or repair services to ASUSTeK in relation to the allegedly infringing products. In its response to the preliminary objection, the Claimant submitted that Arvato's defence concerned the substance of the action. Ericsson's limitation of the claim was accepted by all defendants, including Arvato, and the application was granted by order of 21 October 2024 (Order No 57386/2024).
162. By order filed on 30 October 2024, the Court held that the objection to competence raised by Arvato in its preliminary objection should be dealt with in the main proceedings pursuant to R. 20.2 RoP.

163. The Court observes as follows.
164. Competence must be assessed on the basis of the parties' pleaded case, without any need for a detailed taking of evidence, which is a matter pertaining to the merits, as recalled by the Court of Justice in its judgment of 28 January 2015 in case C-375/13, (paragraph 65: "*it is not necessary to conduct a comprehensive taking of evidence in relation to disputed facts that are relevant both to the question of jurisdiction and to the existence of the claim. The Court seized may, however, examine its international jurisdiction in the light of all the information available to it, including, where appropriate, the defendant's objections*.").
165. This assessment also takes account of Ericsson's amendment of the claim against Arvato, namely that an injunction is now sought only in respect of acts carried out by Arvato in its capacity as an intermediary, although the claim that it is jointly and severally liable for damages is withdrawn.
166. Article 63 UPCA, relied on by Arvato, is not a provision governing the competence of the UPC; it merely provides for a remedy, namely an injunction, and reproduces Article 11 of Directive 2004/48/EC on the enforcement of intellectual property rights. Accordingly, that provision does not determine the competence of the UPC, still less that of the Milan Local Division.
167. The issue before the Court is therefore whether Arvato's conduct, in its capacity as an intermediary, forms part of the infringing activity. In the present case, the documentary evidence

supports the conclusion that the preliminary objection is unfounded, without prejudice to the possibility that Arvato's participation was without fault and therefore does not entail liability for damages, in the light of the considerations set out below.

168. As a preliminary point, the Court observes that the intermediary activity must be assessed by reference to the principal act of infringement which it facilitates, namely, in the present case, ASUSTeK's conduct. The status of intermediary cannot be construed in isolation. Otherwise, it could never be linked to the *locus commissi delicti*, since, if detached from an act of infringement, it would have to be connected solely and exclusively to the place where the intermediary is established.

169. There is no doubt as to ASUSTeK's direct involvement in the commercialisation of the products at issue. Indeed, ASUSTeK has never disputed that fact. As Ericsson pointed out (see Exhibit B1), ASUSTeK is identified as the registrant of the domain name of the global website www.asus.com, on which the allegedly infringing products are offered for sale and which is accessible from all relevant Contracting Member States, including Italy (see Ericsson's Exhibit D2). Furthermore, ASUSTeK is identified in the copyright notice displayed on www.asus.com and on ASUS's European local webpages (such as www.asus.com/it) in the bottom-left corner.

170. ASUSTeK is the sole shareholder of several subsidiaries involved in commercial distribution (Exhibit D1, page 17) and is therefore the ultimate parent company of the ASUS group (Exhibit B1). It forms part of the same corporate structure and distribution chain responsible for the manufacture, offering and placing on the worldwide market of the allegedly infringing products (see also Exhibit D1, page 17 et seq.).

171. When an order is placed through the local website of the relevant Contracting Member State, the ASUS Terms of Use (the "Terms of Use") apply. ASUSTeK is identified as the provider of the products and services. In addition, ASUSTeK's contact details appear at the end of those Terms of Use. This applies to the ASUS local webpages for the following relevant Contracting Member States: Denmark, France, Germany, Italy, the Netherlands and, as from 1 September 2024, Romania (see Exhibit D3).

172. In that context, first, Arvato acknowledges in these proceedings that it carries out activities in the Netherlands falling within the concept of an intermediary. Those activities are also described in the brochure submitted by Ericsson (see the Claimant's Exhibits E8 and E9), in which Arvato presents itself as a provider of logistics support, freight-forwarding services and the like.

173. Second, Arvato's intermediary activities were carried out, at least, in connection with shipments of ASUSTeK products destined for Italy.

174. That circumstance is confirmed by the test purchase carried out in Italy (Ericsson's Exhibits D7 and D10), as well as by those carried out in the Netherlands (Ericsson's Exhibits D8, D9 and D11), in which Arvato is mentioned in the email containing the shipping label.

175. Arvato therefore provides services, in its capacity as an intermediary, which are used by ASUSTeK to infringe the patent in Italy within the meaning of Article 63 UPCA, as well as in other relevant Contracting Member States.

176. Accordingly, the competence of the Milan Local Division, is established under Article 33(1)(a) UPCA, namely *"the local division hosted by the Contracting Member State where the*

actual or threatened infringement has occurred or may occur, or the regional division in which that Contracting Member State participates".
177. An injunction against an intermediary does not require the intermediary itself to be at fault or directly to infringe the patent.
178. Article 63(1) UPCA is not limited to the direct infringer, but also extends to an intermediary whose services are used to carry out or facilitate the infringement.
179. That concept cannot be construed as being limited to distributors; it must be interpreted broadly and may also encompass an entity engaged solely in logistics and storage, provided that its contribution makes the infringement possible.
180. A different assessment is required as regards damages, for which the intermediary's conduct must involve a subjective element amounting at least to negligence.
181. The distinction between injunctive relief and damages in respect of an intermediary is also confirmed by the rules governing a related field, namely intermediary services of the information society (see the Digital Services Act, Regulation (EU) 2022/2065).
182. The legal framework therefore distinguishes between the intermediary's liability and its amenability to an injunction. An injunction may also be directed against an intermediary that is not personally liable for the unlawful conduct where intervention in the services it provides is necessary to bring the infringement to an end or prevent its recurrence. An award of damages, by contrast, requires the establishment of the additional conditions for liability, which cannot be inferred solely from the fact that the intermediary's services were used by third parties to commit the infringement.

183. Arvato's preliminary objection must therefore be dismissed. The action was properly brought against Arvato, in its capacity as an intermediary, before the Milan Local Division, and Ericsson's pleaded case in that regard was neither artificial nor pretextual. Italy remains the relevant location because sales also took place in that Contracting Member State and the intermediary services are shown to be connected with those acts.

7.2. On the merits

7.2.1. Procedural issues

Burden of proof

184. The Court reminds that the burden of proving infringement rests on the Claimant. It is therefore for Ericsson to establish that the accused products implement all features of the asserted claims, either by direct use or by indirect use of the invention.

Timeliness of the Defendants' objection concerning the standard-essentiality of the Patent

185. As explained in the paragraphs above, the UPC does not have jurisdiction to determine, as a principal finding and with *erga omnes* effect, whether or not a patent as such is essential to a standard.

186. However, in infringement proceedings, the UPC has jurisdiction to determine, as an incidental issue, whether one or more patent claims are essential to a standard where the Claimant has relied on that essentiality as a basis for its infringement claim.

187. In the present case, the Claimant's case is as follows: the Defendants' products implement the HEVC standard; the asserted claims of the patent in suit are essential to that standard; therefore, by implementing the standard, the accused products necessarily also implement the asserted claims as part of the direct or indirect infringement acts.

188. In their Statement of Defence, the Defendants did not deny that the asserted patent claims are essential to the HEVC standard (see paragraph 199.7).
189. However, in their Rejoinder, they submitted that the HEVC standard does not implement either feature 1.4 or feature 1.5 of the patent in suit (see paragraph 110 of the Rejoinder).
190. In that regard, Ericsson maintained, including at the oral hearing, that the Defendants' objections were out of time in view of the statements previously made in their Statement of Defence.

Court's assessment
191. The Defendants' submissions were not made out of time.
192. This is so for the following reason.
193. The Defendants' submissions concerning the standard in their Statement of Defence are neither clear nor unequivocal.
194. In particular:
– in paragraph 14 of the Statement of Defence, Defendants submitted that Ericsson had not established that its patents were essential to the standard;
– in paragraph 62, Defendants stated that they took no position as to whether the patents listed in Ericsson's declaration of 14 June 2024 were in fact essential;
– in paragraphs 199.7–200, Defendants stated as follows:
the Defendants do not deny that the asserted claims of the Patent are essential to the HEVC Standard. That is: (i) a decoder that is compliant with the HEVC Standard (i.e. one that operates according to Annex C of the HEVC Standard, which describes a hypothetical reference decoder); and (ii) which is being used to decode and output a HEVC video, would fall within the scope of the Patent claims asserted by Ericsson in these proceedings, either in its own right as an apparatus (in respect of asserted product claims) or by way of its operation (in respect of asserted method claims).
200. However, the Defendants dispute Ericsson's infringement allegations for the following reasons, which are explained below".
195. That statement is unclear. On the one hand, the Defendants state that they do not dispute that the Patent is essential; on the other hand, in their immediate explanation of that assertion, they state that they do not dispute that the Patent is implemented in the Standard. Those are, as is well known, two distinct propositions, since whether a patent claim is necessarily

implemented in a standard, i.e. not merely optional, the patent, with respect to this claim, should also be regarded as essential to the standard.
196. The latter interpretation is supported by a reading of the Statement of Defence as a whole and, in particular, by paragraph 14 thereof.
– in paragraph 372, Defendants reiterated that they did not dispute that the Patent was essential to the Standard, as specified in the preceding paragraphs;
– in their pleading of 23 September 2025, namely the Rejoinder to the Reply to the Statement of Defence, they disputed that the Patent was implemented in the Standard.

197. In view of the uncertainty surrounding the content of the Statement of Defence, the Defendants' Rejoinder clarified their position on the matter. The issues concerned must therefore be regarded as disputed.
198. In any event, even if the Defendants were deemed not to have disputed the standard-essentiality of the Patent, the Court observes that R. 171.2 RoP, which lays down the principle that uncontested matters are deemed admitted, applies only to facts and not to matters of law.
199. In that regard, the Court notes that the relevant facts are derived directly—through the process of interpretation—from the documents themselves, which were not disputed; the interpretation of those documents is a matter of legal argument, in accordance with the case law of the UPC (see UPC Court of Appeal, UPC_CoA_312/2025, decision of 17 April 2025, *Kodak v Fujifilm*).

200. Applying that distinction, the UPC has already held that R. 171.2 RoP does not apply to the assessment of novelty and inventive step (see Milan Local Division, UPC_CFI_472/2024).
201. Similarly, this principle does not apply to the assessment of whether a patent is essential to a standard: the relevant facts are derived from the interpretation of the documents concerned—in this case, the patent and the standard—whereas the relationship between the patent and the standard is a matter of technical and legal assessment.
202. In the present case, standard-essentiality constitutes an element of the infringement action, which is subject to legal assessment of the Court.

ITU declaration
203. The Court observes, as a preliminary point, that Ericsson's declaration of 15 February 2013, by which it signed an ITU declaration relating to the HEVC standard, dated 1 March 2013 by the ITU (see Exhibit ASU-342-D3)—does not constitute evidence that the Patent is essential to the Standard. It is a unilateral declaration by the Patent Proprietor which was not substantively assessed by the ITU.

7.2.2. Infringement requests

204. Claimant directs this action against products placed on at least the Italian and Dutch market, inter alia ASUS VivoBook 16X F1605ZA which product includes a 12th Generation Intel Core i7-processor (Fino a Intel® Core™ i7 12th Gen), which is regarded to include an H.265 decoder (see Annexes A7, D7, D8, D9). Claimant considers ASUS' electronic computing devices, including but not limited to those mentioned in the lists Annexes A5 and A6, to be compatible with the HEVC/H.265 standard, wherein claims 1 and 2 are implemented in this standard, thereby forming a central basis for the infringement allegation. As a result, Claimant asserts direct and indirect infringement of claims 1 and 2 according to Appendix 2:

Country	ASUS entity	Acts and threatened acts of infringement		
		Art 25(a)	Art 25(b)	Art 26(1)
Austria	ASUSTek	X	X	X
Belgium	ASUSTek	X	X	X
Denmark	ASUSTek	X	X	X
Finland	ASUSTek	X	X	X
France	ASUSTek	X	X	X
Germany	ASUSTek	X	X	X
Italy	ASUSTek	X	X	X
	Arvato	X	X	X
	Digital River Ireland	X	X	X
Netherlands	ASUSTek	X	X	X
	Arvato	X	X	X
	Digital River Ireland	X	X	X
Portugal	ASUSTek	X	X	X
Romania	ASUSTek	X	X	X
Sweden	ASUSTek	X	X	X

205. Claimant also asserts claims 4 and 5 to be directly infringed (see 4.5 of Statement of Claim).

206. As stated above, the Claimant states that the infringing products include, but are not limited to, ASUSTeK' laptops, desktops and chromebook computers that implement the HEVC/H.265 standard (see Annex A5 and Annex A6).

207. In this context, Claimant requests the Court to give a declaratory decision that the Defendants are infringing the Patent in the relevant Contracting Member States by making, offering, placing on the market, using, importing and/or storing the Infringing Products and that the Defendants are jointly and severally liable for the damage suffered and to be suffered by Ericsson as a result of this infringement (Articles 64 and 68 UPCA), primarily as of 7 May 2014 (date

of publication of the application for the Patent) or in the alternative, 29 June 2016 (the date of grant of the Patent).

7.2.3. Implementation in the standard

Claim 1

208. The Court understands that the parties are in agreement that for assessment of infringement in the present case, it is expedient to examine whether the subject matter of the asserted claims is implemented in the HEVC standard, which is ITU Recommendation ITU-T H.265 (V9) (09/2023), submitted as Annex C4 by the Claimant. Regarding this question, the Court notes that the parties are only in true dispute about features 1.4 and 1.5 of claim 1. Insofar the Defendants indicated a general lack of evidence with respect to implementation of one or more claims as a whole, i.e. also in view of the remaining features of claim 1, such general allegations are insufficient to refute the evidence provided by the Claimant with the Statement of Claim, which is deemed to comprise the additional pages uploaded with permission of the Court. Therefore, features 1.1, 1.2, and 1.3 are deemed to be implemented in the HEVC standard.

209. Regarding features 1.4 and 1.5, the assessment is as follows.

1.4 "updating (S32) a decoded picture buffer (530, 650) based on said at least one picture identifier by marking (S70) all reference pictures present in said decoded picture buffer (530, 650) and not being associated with any of said at least one picture identifier determined based on said buffer description information as unused for reference, characterized in that"

210. Claimant identifies the decoded picture buffer (DPB) as a memory buffer that stores the decoded reference pictures, cf. section 3.42 of the HEVC/H.265 standard. Furthermore, step 4 in section 8.3.2 of the HEVC/H.265 standard describes that reference pictures in the DPB are marked (i.e. updated) as "unused for reference". Step 4 is performed for all reference pictures in the DPB that are not in any of the five sets, i.e. all reference pictures that are not part of the RPS (reference picture set). In other words, "Marking all reference pictures present in said decoded picture buffer" corresponds to marking all reference pictures in the DPB as "unused for reference" that are not included in the sets RefPicSetLtCurr, RefPicSetLtFoll, RefPicSetStCurrBefore, RefPicSetStCurrAfter, or RefPicSetStFoll.

211. During the oral hearing, Claimant clarified that this mapping, where all five lists are considered, relates to a broad claim construction desired by Claimant. However, feature 1.4 would also be realized in the standard if only the sets related to the current picture would be considered under a narrower claim construction in view of said at least one picture identifier, i.e. only considering RefPicSetLtCurr, RefPicSetStCurrBefore, and RefPicSetStCurrAfter. Claimant makes reference to p. 123, Note 4 of the standard, indicating that the lists for the following pictures can be empty.

212. Defendant argues that the two lists RefPicSetStFoll and RefPicSetLtFoll of the RPS are not used for decoding the current picture (but for the following pictures, thus the suffix "Foll"). Consequently, these lists cannot be mapped to the at least one picture identifier in the meaning

of feature 1.4 because the at least one picture identifier in the meaning of feature 1.4 is limited to reference pictures determined as a decoding reference for the current picture.
213. The Court notes that the standard defines the marking with respect to all picture identifiers in the RPS (i.e. all five lists, see step 4 on p. 123 of the standard), regardless whether the individual identifiers are for the current picture or following pictures. Therefore, considering that the at least one picture identifier relates at least to the current picture and further considering Note 3 on p. 122 of the standard, stating the two lists RefPicSetStFoll and RefPicSetLtFoll are not used for the current picture, the full RPS as described in the standard cannot be equated to the at least one picture identifier of the claim. Rather, the picture identifier as defined in the claim must be equated to a subset of the full RPS, namely RefPicSetLtCurr, RefPicSetStCurrBefore, and RefPicSetStCurrAfter.
214. It follows that the argument of the Defendant is based on the assumption that the RPS must include at least a non-empty RefPicSetStFoll or a RefPicSetLtFoll list.
215. However, the standard mentions cases in which RefPicSetStFoll and/or a RefPicSetLtFoll shall have no entry or an entry “no reference picture” (p. 123 of the standard). It therefore appears to be a relevant question if the definition of the standard envisages a specific situation where the RPS only identifies reference pictures for a current picture.
216. During the oral hearing, the Claimant took the view that RefPicSetStFoll and RefPicSetLtFoll can both be empty. Defendants argued that said lists are storage lists, wherein entries will always be required because there can be no double entries, further considering that entries cannot be marked back as used for reference once being marked as unused for reference. Note 4 of the standard refers to an error management if pictures in said lists are missing due to an error in the DPB. Such accidental error management is exceptional by nature and cannot be regarded as teaching of a method. Therefore, Defendants dispute or at least see no evidence that RefPicSetStFoll and RefPicSetLtFoll could be truly empty.
217. The Court is more convinced of the interpretation of the Claimant. The standard explicitly envisages cases where the RPS does not include any reference pictures for following pictures, i.e. there is no identifier entry in RefPicSetStFoll and no identifier entry in RefPicSetLtFoll. Whether such cases relate to regular desired scenarios or to undesired error scenarios does not matter.
218. Therefore, since the standard does not necessarily require entries in RefPicSetStFoll or RefPicSetLtFoll for identifying reference pictures for following pictures, it follows that the RPS can be formed by RefPicSetLtCurr, RefPicSetStCurrBefore, and RefPicSetStCurrAfter only, and that at least in this case feature 1.4 is implemented in the standard.

1.5 (“said buffer description information defines said at least one reference picture (40,42) in an absolute and explicit way by means of said encoded representation (60) of said picture (10) which contains in said data structure the information about which reference picture to use for reference during decoding, independently of the encoded representation of previous pictures in the video stream”).

219. The Claimant argues with regard to the sub-feature “Independently of the encoded representation of previous pictures in the video stream” that the RPS is used in the decoding process of the current picture. HEVC/H.265 standard does not define a dependency between the information in the data structure about which reference picture to use for reference during decoding and the encoded representation of previous pictures in the video stream.
220. Furthermore, Claimant considers the RPS as an absolute description of the reference pictures used in the decoding process of the current and future coded pictures, cf. Section 8.3.2 of HEVC/H.265. The RPS signalling is explicit in the sense that all reference pictures included in the RPS are listed explicitly (see Annex C4, page 120).
221. Defendants dispute the implementation of feature 1.5 in the standard. Defendants argue that the RPS is an absolute description, but it remains unclear how such information is retrieved from the encoded representation, hence from the bitstream which is signaled from the encoder to the decoder.
222. The Court follows the view of the Claimant in that the RPS defines said at least one reference picture in an absolute and explicit way in the sense of feature 1.5. The RPS, by way of its definition, also includes the information about which reference picture to use for reference during decoding. Since the RPS is absolute and explicit, it follows that the information is independent of the encoded representation of previous pictures in the video stream.
223. Therefore, feature 1.5 is implemented in the standard.
224. It follows that the subject matter of claim 1 is implemented in the standard.

Claim 2
225. Claim 2 comprises as additional feature: *wherein updating (S32) said decoded picture buffer (530, 650) comprises updating (S32) said decoded picture buffer (530,650) to comprise said respective reference picture (40, 42) identified by said at least one picture identifier.*
226. The Court essentially follows the evidence of the Claimant. It is already clear from claim 1 that marking does not affect pictures which are identified by the at least one picture identifier forming the RPS. In this way, the updating step as described in the standard is considered to include a scenario in which un-marked reference pictures remain in the DPB until they are marked as unused for reference. This is understood in the sense that the updating is carried out in such a way that the DPB still comprises the reference picture identified by said at least one picture identifier.
227. Therefore, the subject matter of claim 2 is implemented in the standard.

Claim 4
228. Claim 4 corresponds to claim 1 formulated as a decoder claim. As the standard defines a decoder (see, C.5.1), claim 4 is regarded to be implemented in the standard for the same reasons as claim 1.

Claim 5

229. Claim 5 corresponds to claim 2 formulated as a decoder claim. As the standard defines a decoder (see, C.5.1), claim 5 is regarded to be implemented in the standard for the same reasons as claim 2.

230. The patent in suit is regarded as essential to the standard insofar as claims 1, 2, 4, and 5 are implemented in the standard.

7.2.4. Direct infringement

231. Claimant asserts direct infringement of claims 1, 2, 4, and 5, while Defendants dispute it.
232. As regards direct infringement, Article 69 EPC and the Protocol on its Interpretation apply. The first step is to assess literal infringement by determining whether the features of the patent claims, as construed, are fulfilled.
233. The Court notes that Claimant stated at the oral hearing that the attacked devices, particularly the relevant Intel and AMD processors, necessarily require additional software for decoding videos according to the HEVC standard. Therefore, the Court understands that Claimant admits that the processors in the attacked devices neither form decoders in the meaning of claims 4 and 5, nor are they natively configured to carry out the methods according to claims 1 and 2. Rather, the end user always needs to download additional software before the devices can ultimately be used to decode according to the HEVC standard. It is therefore evident to the Court that the parties are in agreement that the attacked devices do not realize all features of claims 4 and 5 and are also not configured to carry out the method of claims 1 and 2 without additional configuration, which means that a direct infringement is generally out of question.
234. Nevertheless, Claimant argues that, despite the additional configuration, it would be clear that the end user would carry out an additional configuration step. In this context, Claimant argues that Defendants showed themselves that the user can simply use the pre-installed Windows Media player and add the HEVC Video Extension after trying to play an HEVC video for the first time, thereby rendering the device to infringe the patent in suit. To this end, Claimant reads the related error message and offer for the extension as *instructions to the user* to proceed with installing the extension. In support of this position, the Claimant cites an Order from LD Munich dated 27 August 2024, UPC_CFI 74/2024, where it was indicated that, in an indirect infringement scenario, a direct infringement can nevertheless be considered where it is sufficiently certain that the customer of the infringer will carry out acts to complete subject matter falling under the patent, so that the customer effectively acts as an extended workbench from the perspective of the infringer.
235. The Court does not follow the argument of the Claimant. While there may indeed be scenarios as indicated in the cited case law, the Court does not see such a case here. First, it must be borne in mind that a laptop is a multi-purpose device that can be used for many things, not only for playing videos that have been coded according to a specific coding standard. Second, Claimant has not provided sufficient evidence that the end user will certainly install an HEVC extension pack once it is offered. Under these circumstances the Court is not convinced that the user would in any case want to play HEVC videos. The Court further considers in the present

case that download and installation of additional decoding software must be treated as optional unless the user is specifically instructed or motivated to the contrary. The mere offer to install a HEVC extension pack is not regarded as an instruction to make use of this extension pack. The fact that the extension pack is evidently offered at an additional cost also speaks against an instruction that a customer would follow with sufficient certainty.
236. Therefore, the Court sees no direct infringement of claims 1, 2, 4, and 5 in view of the attacked devices.

7.2.5. Indirect infringement

237. Claimant asserts indirect infringement of claims 1, 2, 4, and 5, which Defendants dispute.
238. The Court observes that indirect infringement under Article 26 UPCA requires:

(i) from an objective perspective, that a person supplies third parties with means relating to an essential element of the patented invention;
(ii) from a subjective perspective, that that person knows, or ought to know, that those means will be used to put the invention into effect.

239. The UPC case law has held that:

(i) as regards the objective element, it is not necessary for all the features of the claim to be present simultaneously at the time of supply. See, in particular:
    - the recent decision of the Court of Appeal of 27 March 2026 (UPC_CoA_898/2025, *Onward v Niche*), according to which the intended use may be inferred from objective circumstances such as instructions, product design or actual use;
    - the decision of the Düsseldorf Local Division of 16 April 2026 (UPC_CFI_779/2024, *Brita SE v Wessper Sp.zo.o.*), in which it was held to be sufficient that the supplied component is intended to cooperate with another component so as to put the patented teaching into effect. The sole decisive factor is whether the component at issue is designed in such a way that it is capable of interacting with a second component designed in accordance with the invention, as provided for in the patent. The supplied means relates to an essential element of the claimed invention. That requirement is satisfied where the means are suitable for functionally interacting with one or more features of the patent claim in implementing the protected inventive concept. The objective requirements do not necessarily presuppose that all claim components physically coexist at the time of supply, provided that they are specifically designed to cooperate with a suitably configured second component.
(ii) as regards the subjective element, it is not considered necessary to establish actual knowledge of the infringement. Advertising materials, manuals, instructions for use or activation procedures directing users towards an infringing use may suffice to satisfy the "should have known" requirement and may constitute decisive evidence of the intention or foreseeability of such infringing use. See in this regard:
    - Düsseldorf Local Division, decision of 14 January 2025, UPC_CFI_16/2024, *Ortovox v Mammut*: "*The Defendants advertise, and therefore know, not only that the*

contested embodiment is objectively suitable for use in a patent-infringing manner, but also that customers purchasing the contested embodiment will use it to perform the method according to the patent. The Defendants should therefore, in any event, have been aware both of its objective suitability for use in accordance with the patent and of the users' intention to use it in that manner.";

- Munich Local Division, order of 27 August 2024, UPC_CFI_74/2024, *Hand Held Products, Inc. v Scandit*, in which it was held that the Defendant was aware that the means supplied by it—a software development kit—were suitable and intended for putting the invention at issue into effect, namely by creating a specific software program. The Court held that advertising certain patent-protected functions may constitute indirect patent infringement. The Defendant had indirectly infringed the patent because it could be presumed that customers would use the products in the manner suggested in the supplier's advertising materials, instructions for use and other documentation.

240. In the present proceedings, the Defendants dispute indirect infringement (see paragraph 300 of their written pleading of 24 September 2025), submitting that: "The claimant has not shown that the attacked embodiments, as alleged "essential means," cannot be used reasonably for non-infringing purposes. In addition, to use attacked embodiments, it is not necessary or an automatic consequence that HEVC files are decoded at all. There might not be a need to decode video files at all. And even if a customer wanted to watch films on the devices s/he could use videos coded according to any of the other standards that the attacked embodiments".

241. In that regard, the Court considers as follows.

242. From an objective perspective, the accused products supply means relating to an essential element of the invention. The Intel/AMD processors in the attacked products provide, according to the specification presented by Claimant (Annex A9, A10) and undisputed by Defendant, explicit hardware acceleration support for performing the HEVC decoding process. The Defendants' objection that the products, as sold, are unsuitable to implement the HEVC standard decoding process because the user must download, for example, the HEVC Video Extensions codec package or other third-party software such as VLC in order to play HEVC files using the AMD/Intel components—unless such software is already installed—is unfounded. The Defendant's "test" carried out with an accused product purportedly demonstrating that the sold devices are unable to play HEVC files does not change this because it only shows that an additional step may be required to realize the subject matter of the asserted claims. The unsuccessful attempts of the Defendant to play a HEVC video do not prove that the relevant processors are not suitable to decode HEVC without additional software. The screenshots provided by Defendants based on their own experiments with a self-procured laptop do not form sufficient evidence that the relevant processors are not supporting HEVC decoding in accordance with their specifications.

243. Indeed, the Intel/AMD processors provide dedicated hardware acceleration for HEVC video decoding and are thus natively configured to operate in conjunction with software to

decode HEVC video content in accordance with the HEVC standard. This is sufficient to qualify the attacked devices, particularly each of said processors, as an essential element in the meaning of Article 26 UPCA, given that the asserted claims are found to be implemented in the HEVC standard. It can therefore be left open which additional software, in particular IntelVLP or rocDecode or other software can be used for decoding and to which extent such software implements the standard in conjunction with said processors.
244. As regards Claimant's argument that a pre-installed media player, being configured to decode HEVC files upon download and installation of a corresponding extension pack, may as such constitute an essential element in the meaning of Article 26 UPCA, a decision on this point is not required given that infringement is already established on the basis of the dedicated HEVC hardware support.
245. In summary, the accused products provide means relating to an essential element for putting into effect the invention in accordance with claims 1, 2, 4 and 5 of the Patent in suit.
246. From a subjective perspective, the Court has no doubts that ASUSTeK intentionally and knowingly promotes and facilitates the infringement of the Patent. The dedicated hardware support of the Intel/AMD components in relation to HEVC is fully evident through the corresponding specifications, which ASUSTeK at least should have known. Furthermore, ASUSTeK expressly confirms that the Intel/AMD components provide hardware support for the HEVC standard and operate in conjunction with third-party software to decode HEVC video content.
247. Accordingly, the requirements for indirect infringement are satisfied.
248. Therefore, the Court finds that claims 1, 2, 4, and 5 are indirectly infringed in the meaning of Article 26 (1) UPCA.

8. FRAND Defence

8.1. Parties' positions

249. ASUSTeK raised a FRAND defence, arguing that Ericsson had abused its dominant position on the relevant market, contrary to Article 102 TFEU, and had failed to comply with the requirements laid down by the Court of Justice in its judgment of 16 July 2015 in case C-170/13, (*Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH*, ECLI:EU:C:2015:477). In support of its position, ASUSTeK also relied on paragraphs 43 to 45 of the European Commission's Opinion of 15 April 2024 (Exhibit ASU 342-H4) and on UPC case law, in particular the decision of the Mannheim Local Division in UPC_CFI_210/2023, paragraphs 172, 173 and 188, according to which the proprietor of an SEP "*is entitled to obtain an injunction unless, in seeking such relief, it abuses its dominant position*".
250. Ericsson argued, first, that the Huawei v ZTE judgment was inapplicable, on the ground that it does not hold a dominant position on the relevant market. In that regard, Ericsson pointed out that, in Huawei v ZTE, the patent proprietor's dominant position was not disputed (see [para 43] "*As the referring Court states in the order for reference, the existence of a dominant position has not been contested before it by the parties to the dispute in the main proceedings. Given that*

the questions posed by the referring court relate only to the existence of an abuse, the analysis must be confined to the latter criterion".)

8.2. Source of the obligation to grant a FRAND licence

251. As a preliminary point, the Court recalls the relevant CJEU and UPC case law:

(i) *CJEU case law*
judgment of 6 April 1995, Joined Cases C-241/91 P and C-242/91 P, RTE and ITP v Commission (Magill), ECLI:EU:C:1995:98; judgment of 19 April 2012, Case C-549/10 P, Tomra v Commission, ECLI:EU:C:2012:221, para. 38; judgment of 16 July 2015, Case C-170/13, Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH, ECLI:EU:C:2015:477;

(ii) *UPC case law*
Munich Local Division, UPC_CFI_2/2023, decision of 19 September 2023, Genomics v NanoString; Munich Local Division, UPC_CFI_9/2023, decision of 18 December 2024, Huawei v Netgear; Düsseldorf Local Division, UPC_CFI_135/2024, decision of 18 March 2026, , Dolby v Beko; Mannheim Local Division, UPC_CFI_210/2023, decision of 22 November 2024, Panasonic v Guangdong OPPO; Mannheim Local Division, UPC_CFI_936/2025, order of 30 September 2025, Inter-Digital VC Holdings v Amazon.com, Inc.; Mannheim Local Division, UPC_CFI_86/2025, decision of 16 June 2026, para. 207 et seqq., Inter-Digital v The Walt Disney Company et al.; Hamburg Local Division, UPC_CFI_494/2025 and UPC_CFI_1128/2025, decision of 24 August 2026, paras. 226–227; Düsseldorf Local Division, UPC_CFI_87/2025 and UPC_CFI_488/2025, decision of 23 July 2026, paras. 458 et seqq., Inter-Digital VC Holdings, Inc. v The Walt Disney Company.

252. That said, The Court observes that the obligation to negotiate on FRAND terms may arise from:

a) The SEP holder's dominant position on the relevant market

253. Under European Union law, such an obligation derives from Article 102 TFEU, as interpreted by the Court of Justice of the European Union. In such circumstances, EU law applies, as it constitutes the primary source of law to be applied by the Unified Patent Court.

254. See LD Mannheim UPC, CFI_210/2023 *(para 189): "The Unified Patent Court applies Union law in its entirety and respects its primacy, Article 20 UPCA. Union law is the primary source of law to be applied by the Unified Patent Court, Article 24(1)(a) UPCA. In questions concerning the correct interpretation of European law, the Court of First Instance may refer questions relevant to the decision to the CJEU, Article 267 TFEU. The decisions of the CJEU are binding on the Unified Patent Court, Article 21 UPCA".*

b) An obligation unilaterally undertaken by the patent proprietor

255. In such circumstances, the obligation to negotiate applies irrespective of whether the patent proprietor holds a dominant position. The applicable national law must be determined in accordance with Regulation (EC) No 593/2008 on the law applicable to contractual obligations.

In particular, Ericsson signed the ITU declaration on 15 February 2013. As is well known, the International Telecommunication Union (ITU) is an international organisation and a specialised agency of the United Nations, headquartered in Geneva. The ITU Telecommunication Standardization Sector (ITU-T) develops international telecommunications standards. In the field of video coding, its Video Coding Experts Group (VCEG), together with MPEG/ISO, developed the HEVC/H.265 standard. Ericsson selected 'Option 2', thereby declaring its willingness to grant licences for implementations of the HEVC standard to an unlimited number of applicants, on a worldwide basis and on reasonable and non-discriminatory (RAND) terms. That undertaking was subject to reciprocity, namely the grant of a cross-licence in respect of any HEVC SEPs controlled by the licensee. The obligation undertaken by Ericsson to negotiate, subject to reciprocity, is governed by Swiss law. Article 2 of the Swiss Civil Code requires the parties to negotiate in good faith.

256. The two sources of the obligation may coexist. The patent proprietor's undertaking to enter into a licence agreement does not exclude the obligation arising under Article 102 TFEU.

8.3. Dominant position

257. ASUSTeK submits that:

- ✓ the Court of Justice defined the concept of a dominant position as follows: "*a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers"* (Case C-27/76, United Brands v Commission [1978] ECR 207);
- ✓ in the present case, the relevant product market is the market for the licensing of the patent concerned, namely the individual SEP, consistently with the European Commission's decision of 29 April 2014 in Case AT.39985, Motorola – Enforcement of GPRS Standard Essential Patents (see paragraph 302 of the Statement of Defence);
- ✓ Ericsson therefore holds a 100% market share in the relevant upstream market;
- ✓ the majority of content providers use the HEVC standard (Exhibit ASU-342-H7);
- ✓ ASUSTeK relies on the Court of Justice's judgment in Huawei v ZTE and on Advocate General Wathelet's Opinion of 20 November 2014 (ECLI:EU:C:2014:239); According to ASUSTeK, the Advocate General considered that the ownership of a standard-essential patent may give rise to a presumption that its holder enjoys a dominant position on the relevant market; with specific regard to the HEVC standard, ASUSTeK relies on two decisions of the German courts, namely the Regional Court and the Higher Regional Court of Düsseldorf (Exhibits ASU-342-H5 and ASU-342-H6), according to which the proprietor of an HEVC standard-essential patent holds a dominant position, since no equivalent alternatives are available on the market;
- ✓ ASUSTeK also relies on an article indicating that the majority of content providers, including Amazon, Apple and Disney, use the HEVC standard, which is reportedly employed by 77% of content distributors referred to in that article.

258. Ericsson submits that:

- ✓ it does not hold a dominant position and submits, as a preliminary matter, that the burden of proving the existence of a dominant position rests with ASUSTeK (see Article 2 of Regulation (EC) No 1/2003 and Article 54 UPCA). It contends that the Defendant has failed adequately to plead and establish both the relevant product market, whether upstream or downstream, and the relevant geographic market, as required by the UPC case law;
- ✓ there is no necessary correlation between ownership of a standard-essential patent and the existence of a dominant position. The Court of Justice did not rule on that issue in Huawei v ZTE (see paragraph 43), and the matter remains controversial in academic commentary. Ericsson also relies on the case law of the Court of Justice according to which the mere ownership of an intellectual property right does not, in itself, confer a dominant position (Court of Justice, 6 April 1995, Magill, Joined Cases C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98, para. 46).
- ✓ Ericsson also relies on the decision of the Munich Local Division in Huawei v Netgear (UPC_CFI_9/2023, p. 136), arguing that the assessment must be based on the specific circumstances of each individual case and may be carried out by applying the "balancing principles" developed by the Court of Justice in Huawei v ZTE. In that case, the Court found that Huawei did not hold a dominant position because the use of the relevant standard, and therefore of the patent, was not mandatory.
- ✓ In order to determine whether a dominant position exists, the relevant market must first be defined in terms of products scope and geographic scope. Only then can it be determined whether the undertaking concerned holds a dominant position on that market (Munich Local Division, UPC CFI- 2/2023, decision of 19 September 2023, page. 93 e seq. Genomics v NanoSstring; UPC CFI 135/2024, Local Division Düsseldorf, decision of 18 March 2026);
- ✓ In the present case, Ericsson argues that it does not hold a dominant position. In particular:
  - as regards the relevant product market, the Defendants have access to sufficient substitute technologies enabling them to remain competitive in the downstream product market. In the upstream market, they can rely on six alternative technology standards, namely H.264, MPEG, MPEG-2, AV1, EVC and/or VP9. AV1, for example, is said to outperform HEVC and has received substantial support from major industry players such as Google, Apple and Microsoft (Exhibit E38). Furthermore, streaming services such as Disney+, Amazon Prime Video and Apple TV+ also support the H.264 video codec standard. Accordingly, Ericsson submits that is share of the relevant market would amount to only 16.67%;
  - as regards the relevant geographic market, Ericsson contends that the market is global in scope, with the result that any market position it may hold is further diluted;

- lastly, Ericsson relies on a recent decision of the Düsseldorf Local Division, also concerning the HEVC standard, in which the Court held that the patent proprietor did not hold a dominant position (see Düsseldorf Local Division, UPC_CFI_87/2025 and UPC_CFI_488/2025, decision of 23 July 2026).

259. The Court observes as follows.
260. As a preliminary point, the considerations set out below are confined to the present case and are based solely on the parties' submissions, without any further technical or economic investigation, which would have required the involvement of court-appointed experts and extensive enquiries incompatible with the need for the expeditious resolution of the proceedings.
261. Accordingly, the following assessment is confined to the present case and has no bearing on other cases, since the issue is determined only incidentally for the purposes of the present proceedings**.**
262. For the purposes of interpreting Article 102 TFEU and of the assessment set out below, reference should be made, *inter alia*, to:
- the extensive case law of the Court of Justice on this matter;
- the European Communication's Guidelines of 3 September 2026, regarding new "*Guidelines on the application of Article 102 of the Treaty on the Functioning of the European Union to abusive exclusionary conduct by dominant undertakings";*
- the Commission Notice on the definition of the relevant market for the purposes of Union competition law ('*Market Definition Notice'*), OJ C, C/2024/1645, 22 February 2024, which is expressly referred to in the above mentioned Commission Guidelines of 3 September 2026, *inter alia*, for the purposes of defining the relevant market (see para. 18).

263. As regards the burden of proof:
- there is no presumption that the proprietor of an SEP holds a dominant position. Indeed, the European Communication of 3 September 2026 states, in footnote n. 58 that **"***The mere possession of IP rights does not necessarily confer a dominant position"* (in this regard, see also Düsseldorf Local Division, in cases UPC_CFI_135/2024 and UPC_CFI_477/2024, Dolby v. Beko/Arçelik, decision of 18 March 2026);
- but *"Their possession may in certain circumstances create a dominant position by enabling an undertaking to prevent effective competition on the market; see judgment of 6 December 2012, AstraZeneca v Commission, C-457/10, EU:C:2012:770, paragraphs 186-187*[1]*. While ownership of a standard essential patent ('SEP') does not on its own*

[1] "*As regards, next, the arguments put forward by the EFPIA criticising the General Court's finding, at paragraph 275 of the judgment under appeal, that the Commission did not commit any such error in including in that assessment the existence and use of AZ's intellectual property rights, the General Court was fully entitled to hold, at paragraph 270 of that judgment, that, although the mere possession of intellectual property rights cannot be considered to confer such a position, their possession is none the less capable, in certain circumstances, of creating a dominant position, in particular by enabling an undertaking to prevent effective competition on the market (see, to that effect, Magill, paragraphs 46 and 47). 187 As the General Court observed in this connection at paragraph 271 of the judgment under appeal, Losec, as the first PPI to be introduced on the market, enjoyed particularly*

equate to dominance, it may nevertheless be established that a SEP confers a dominant position based on an assessment of all the relevant factors. See in this respect Commission decision of 29 April 2014 in case AT.39985 – Motorola, paragraphs 223 and 241[2]*; and Commission decision of 29 April 2014 in case AT.39939 – Samsung, paragraph 46 For another example of dominance in the field of industry standards, see Commission decision of 9 December 2009 in case AT.38636 – Rambus, paragraphs 18-26.;"*[3]

- accordingly, it must be reiterated that the burden of proving the existence of a dominant position rests with the licence seeker (see Munich Local Division, UPC_CFI_9/2023,

---

strong patent protection, on the basis of which AZ brought a series of legal actions which enabled it to impose significant constraints on its competitors and to dictate to a large extent market-entry terms to them. Moreover, the existence and use of intellectual property rights was only one of the various factors on which the Commission based the finding in this case that AZ held a dominant position on a number of national markets during the reference period".

[2] See para 223 Motorola case *"An important factor is very large market shares, which are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position. The mere ownership of a SEP does not, however, in itself equate to dominance"*
See para 241 Motorola case *"Therefore, the Commission's assessment of whether Motorola enjoys a dominant position is based on the economic strength Motorola enjoys as the holder of the Cudak GPRS SEP vis-à-vis the market as a whole, and not on the basis of its negotiating position vis-à-vis one or more customers such as Apple.*

[3] *See Para (18) "Position of the parties on the relevant market (18) JEDEC, an industry-wide US-based standard setting organisation, developed a standard for DRAMs. JEDEC SDR DRAM standard-compliant chips were the main type of DRAM chip on the market as early as 1999, accounting for 84% of DRAM chips sold. By August 1999, the JEDEC DDR DRAM standard had been agreed, further entrenching the evolutionary path of the JEDEC DRAM standards in question.*
Para (19) JEDEC-compliant synchronous DRAM chips account for the vast majority of DRAM chips currently sold worldwide, representing more than 96% in terms of overall sales of DRAM chips between 2004 and 2008. Virtually all market participants confirmed that it is commercially indispensable to comply with JEDEC standards in order to be able to sell DRAM chips on the Community or worldwide market. Rambus' RDRAM technology and its successor, XDR DRAM, represent the main non-JEDEC-compliant DRAM interface technologies.
Para (20) "As Rambus asserts patents on all JEDEC-compliant SDRAM chips and owns the proprietary RDRAM and XDR DRAM technology, the percentage of worldwide commercial DRAM production exposed to Rambus' patent claims is thus more than 90%. Rambus has been and remains the only company asserting patents on DRAM interface technology".
Para (21) "Every manufacturer wishing to produce synchronous DRAM chips or chipsets complying with JEDEC standards must therefore either acquire a patent licence from Rambus or litigate its asserted patent rights".
Para (22) There are substantial barriers to entry on the market, primarily due to the fact that the industry is locked in to JEDEC standards. Firstly, the initial costs and efforts relating to standards development are substantial. Furthermore, there are significant costs associated with switching from a standard once it has been adopted".
Para (23) "First and foremost, the specifications of a new standard would need to be agree with the companies active in the sector (DRAM manufacturers, microprocessor manufacturers, component manufacturers, original equipment manufacturers (OEMs) and others). This in itself would take a significant amount of time. Moreover, the marketing burden for a new standard and related technology would also be significant".
Para (24) "As adoption of a new technology would also carry high risk and substantial costs for customers, those customers would in fact need to be convinced that the new technology was viable and would be available in sufficient volume at an acceptable cost. Companies producing PCs and servers would need to develop and test new system architectures. Microprocessor and chipset manufacturers would also need to design chips to accommodate the new standard".
Para (25) "In parallel with the development of a new standard, DRAM manufacturers would need to consider the design of compliant parts and the new chips would need to be tested before mass production".
(Para 26) " On the basis of the above, the Commission provisionally considered that Rambus held a dominant position on the market at the point when it started asserting its patents and has continued to hold that dominant position since. 3.3.".

decision of 18 December 2024, p. 139, Huawei v Netgear), in accordance with Article 2 of Council Regulation (EC) No 1/2003;
- the standard of proof to be met by the licence seeker in establishing the existence of a dominant position must be assessed in the light of the considerations set out above.

Relevant Product Market

264. The Commission Notice on the definition of the relevant market for the purposes of Union competition law (C/2024/1645) clarifies that:

(a) the relevant product market comprises all products that customers regard as interchangeable or substitutable with the product or products of the undertaking or undertakings concerned, on the basis of the products' characteristics, prices and intended use, taking into account the conditions of competition and the structure of supply and demand on the market (para. 12(a));
(b) the concept of a "product" also encompasses technologies (see para. 9);
(c) in defining the relevant product market, it is necessary to consider:
    - demand substitution: whether customers regard other products or technologies as interchangeable or substitutable on the basis of their characteristics, prices and intended use;
    - supply substitution: whether suppliers can switch production rapidly to the supply of substitute products without incurring significant additional costs or delays.

265. In the present case, ASUSTeK argued that the relevant market should be defined as the market for licences to the individual SEP. Since, according to the Claimant's case, the patent is essential to the standard, Ericsson would hold a market share approaching 100%. In support of its position, ASUSTeK relies on the above-mentioned judgment of European Commission in Motorola.

266. Ericsson, by contrast, submits that the relevant product market should be defined more broadly as the market for technologies performing the same function, namely video decoding. From that perspective, alternative standards to HEVC, such as AV1, AVC/H.264, the EVC "baseline" profile and VP9, would be available. According to Ericsson, those alternative standards could enable ASUSTeK to remain competitive in the same downstream market segment without implementing the HEVC/H.265 standard.

267. In support of its position, Ericsson also relies on the submissions made by ASUSTeK itself in this regard [redacted]

268. Against that background, and within the limits of an incidental assessment, without any specific evidentiary examination of the competition law issue under consideration and having regard to the parties' submissions, the Court makes the following observations.

269. ASUSTeK's position cannot be accepted as such. Defining the relevant market as the market for the licensing of the asserted SEP would, by definition, give the patent holder a 100% market share and render dominance automatic.
270. Such a proposition must, however, always be assessed in the specific circumstances of the case, since ownership of an SEP does not, in itself, automatically establish a dominant position. Dominance cannot be presumed and must always be assessed independently under Article 102 TFEU, in the light of the conditions prevailing on the relevant market and the competitive constraints imposed by other market participants on the allegedly dominant undertaking, which may prevent it from behaving to an appreciable extent independently on that market. The Motorola decision relied on by ASUSTeK must be understood in that sense, as it examined the specific competitive circumstances of the case.
271. Ericsson's position cannot be accepted either, as it disregards the existence of a standard to which the patent is essential. Where an SEP is concerned, the assessment of whether products or technologies are interchangeable must necessarily take account of the relevant standard. As the Düsseldorf Local Division held, where a standard is concerned, the granting of rights enabling suppliers to market their products constitutes a distinct market, namely the licensing market (Düsseldorf Local Division, 18 March 2026, UPC_CFI_135/2024, Dolby v. Beko/Arçelik, para. 461).
272. Turning to the definition of the relevant market, the following observations are warranted.
273. The European Commission's Notice of February 2024, cited above, now permits an assessment of the relevant market for the licensing of patented technology, in addition to the market for devices implementing the standard (see footnotes 9 and 124).
274. In the present case, demand-side and supply-side substitutability must be examined by reference to:

- the upstream technology market, namely the market for technology licensing, in which ASUSTeK, on the demand side, obtains a licence to technology from Ericsson, on the supply side;
- the downstream technology market, namely the market in which ASUSTeK, on the supply side, sells devices incorporating the decoding technology to end consumers, on the demand side.

275. Although formally distinct, these two levels affect one another. Demand-side substitutability in the upstream technology market must be assessed taking account of the consequences for the licensee in the downstream market, in terms of the actual risk of losing market share if the specific technology covered by the licence is not implemented in the devices offered for sale to consumers.
276. As regards demand-side substitutability in the upstream market, the fact that other technologies perform video-decoding functions does not, in itself, establish that they constitute effective substitutes for HEVC. A device manufacturer such as ASUSTeK must assess whether support for another standardised technology can replace support for the HEVC standard without substantially undermining the competitiveness of its products in the downstream market.

277. In that respect, ASUSTeK submitted that 90% of consumer devices support the HEVC standard (see paras 44 and 45 of its pleading filed on 23 September 2025). HEVC is therefore not a niche technology. Video content encoded in accordance with the HEVC standard is widely used, for example, by some of the leading video-streaming service providers, such as Netflix, Amazon Prime and Disney (see ASUSTeK's Annex ASU-342-H7).
278. An end-user device that did not support HEVC video decoding would be unable to compete in the relevant product markets, since consumers have an interest in purchasing devices that allow them to access all commonly used video formats. The possibility of implementing alternative technologies, namely other video-coding standards, in those devices therefore does not eliminate the commercial need to offer consumers a product that also supports the HEVC standard. Implementation of the HEVC standard in devices must accordingly be regarded as fundamental to purchasing decisions, as it meets an essential expectation of end users and is therefore a decisive factor for competitors operating in the downstream market.
279. Nor is the argument persuasive that certain online streaming service providers, particularly Disney, have progressively abandoned the HEVC standard following judicial decisions. The position of a streaming service provider differs fundamentally from that of an end user. Streaming service providers offer content and services on the market, whereas end users consume those services. Their respective commercial positions, incentives and interests are therefore substantially different. The fact that a streaming service provider may decide to switch to an alternative coding technology does not support the conclusion that manufacturers of consumer devices can realistically dispense with support for a widely adopted video standard. From the perspective of device manufacturers, maintaining compatibility with commonly used video formats remains essential to meeting consumer expectations and preserving the commercial competitiveness of their products.
280. In that respect, the criterion of effective substitutability referred to in paragraphs 6, 12(a) and 23–28 of the European Commission's Notice of February 2024 requires, for the purposes of market definition, the identification of alternatives that exert effective and immediate competitive constraints from the perspective of the licence seeker, here ASUSTeK.
281. It should be recalled in that connection that the Claimant identified H.264/AVC, MPEG AV1, EVC and VP9 as alternative technologies which, it submitted, were competitive in terms of their characteristics, price and intended use (see para. 452 of Ericsson's pleading of 30 June 2025).
282. However, within the limits of the present incidental assessment, those technologies do not appear to constitute immediately available substitutes, having regard to:

- the costs of adapting production processes, network effects, interoperability and complementarities of use (see paragraph 57 of the European Commission's Notice of February 2024);
- the judgment of the Düsseldorf Regional Court (Germany) of 21 December 2021 in Case No. 4c O 42/20 (Annex ASU-342-H5), according to which no alternative standards offer performance equivalent to HEVC in terms of transmitting the same amount of data using the same bandwidth while maintaining good quality and an equally low bitrate. According

to that passage, it would therefore not be possible to avoid obtaining an HEVC licence by resorting to an equivalent substitute technology.

283. As regards supply-side substitutability, no evidence has emerged from which it could be inferred that other technology providers could switch to supplying substitute products or technologies within a short period and without incurring significant additional costs or risks.

284. Licences to other technologies therefore do not appear to constitute effective substitutes for a licence to Ericsson's SEP, since they do not enable manufacturers to dispense with HEVC compatibility without significantly undermining the competitiveness of their devices in the downstream market. Access to the required functionality thus entails the use of Ericsson's patented technology.

285. It must therefore be concluded that licence purchasers in the upstream market would not regard devices lacking HEVC support as adequate substitutes for devices that support that standard. HEVC compatibility is a commercially necessary and non-substitutable feature if significant losses of market share in the downstream market are to be avoided.

286. The Court therefore considers that the relevant product market is the market for the licensing of the technology protected by the individual SEP. This finding as to the relevant market is separate from the assessment of whether a dominant position actually exists, which will be undertaken below, taking due account of the inextricable link between the licensing of the technology and the market for devices implementing that technology.

Relevant Geographic Market

287. ASUSTeK submitted that the relevant geographic market is the EEA.

288. Ericsson, by contrast, submitted that the relevant geographic market is global in scope.

289. In that regard, the Court refers, first, to following passages of the above-mentioned European Commission Notice of February 2024:

- *"The relevant geographic market comprises the geographic area in which the undertakings involved supply or demand relevant products, in which the conditions of competition are sufficiently homogeneous for the effects of the conduct or concentration under investigation to be able to be assessed, and which can be distinguished from other geographic areas, in particular because conditions of competition are appreciably different in those areas"* (see para 12 (b);
- *"Geographic markets can range from local to global, depending on the facts of the case."* (see para 38);
- "*Similarly, when customers around the world have access to the same suppliers on similar terms regardless of the customers' location, for instance if they purchase from undertakings located anywhere in the world on similar terms, the relevant geographic market is likely to be global (*see para 69);
- Regulatory or technical barriers may prevent an otherwise international market from being regarded as global (see paras. 70–71);
- where significant research and development ('R&D') activities are undertaken *"in the absence of evident national or other geographic specificities, the relevant geographic*

*markets are often global in scope, or in any case not narrower than EEA-wide" (*see para 92 and note 126).

290. In light of those considerations, the Court considers that, in the present case, and again solely for the purposes of the incidental assessment and having regard to the specific circumstances of the case, the relevant geographic market is global in scope.

291. Indeed, the market concerned is characterised by a significant degree of research and development activity, and ASUSTeK has not submitted that licence providers offer different terms depending on the geographic area concerned, nor has it established the existence of regulatory or technical barriers capable of preventing the market from being regarded as global.

As regards dominance

292. Having thus defined the relevant market, the Court makes the following observations as regards the existence of a dominant position. In its Communication of 3 September 2026, the European Commission clarified as follows in paragraph 16: "*dominant position relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market (24), by giving it the power to behave to an appreciable extent independently of its competitors, of its customers and ultimately of consumers"*.

293. That said, the Court notes that, in the present case, ASUSTeK has challenged only the existence of single dominance, and not collective dominance.

294. As regards single dominance, the following factors must be assessed (see Commission Communication C (2026) 6118 of 3 September 2026, referred to below in relation to the relevant individual factors):

✓ Market position of the undertaking concerned and of its competitors (2.2.1)

"In markets where there are frequent and significant investments in research and development ('R&D'), the level of R&D expenditure or the number of patents or patent citations may be used as metrics to assess the market position of the undertaking concerned" (see para. 28);

✓ Barriers to entry or expansion (2.2.2)

Regarding the barriers to entry due to intellectual property rights "*The mere possession of IP rights does not necessarily confer a dominant position, but their possession may in certain circumstances create a dominant position by enabling an undertaking to prevent effective competition on the market; see judgment of 6 December 2012, AstraZeneca v Commission, C-457/10, EU:C:2012:770, paragraphs 186-187. While ownership of a standard essential patent ('SEP') does not on its own equate to dominance, it may nevertheless be established that a SEP confers a dominant position based on an assessment of all the relevant factors. See in this respect Commission decision of 29 April 2014 in case AT.39985 – Motorola, paragraphs 223 and 241; and Commission decision of 29 April 2014 in case AT.39939 – Samsung, paragraph 46. For another example of dominance in the field of industry standards, see Commission decision of 9 December 2009 in case AT.38636 – Rambus, paragraphs 18-26.)* (see footnote 58).

✓ Countervailing buyer power (para. 2.2.3)

295. Countervailing buyer power is less likely to be present "*when switching away from the undertaking is subject to significant difficulties (86) or when buyers would risk losing significant business if they were to stop carrying the products of the undertaking concerned"*. This can be the case if the products of the undertaking concerned are considered 'must-have' products by buyers; see Commission decision of 23 May 2024 in case AT.40632 – Mondelez Trade Restrictions, paragraphs 211-215. (see footnote n. 87).

296. The Court therefore makes the following observations.
297. The existence of a dominant position must be assessed on a case-by-case basis and does not automatically follow from the mere ownership of an SEP;
298. In the present case, barriers to entry exist, having regard to the fact that Ericsson is the proprietor of an SEP. As stated above, this constitutes an indication of dominance, which must be assessed together with all the other relevant circumstances of the case;
299. Buyers in the relevant market, in the present case ASUSTeK, have no significant countervailing buyer power since *"buyers would risk losing significant business if they were to stop carrying the products of the undertaking concerned"*. This may be the case where the products of the undertaking concerned are considered 'must-have' products by buyers (see Commission decision of 23 May 2024 in case AT.40632 – Mondelez Trade Restrictions, paragraphs 211-215; see note 87).
300. End consumers expect the final products to support the different video-decoding standards.
301. Reference may be made to the decision of the Düsseldorf Local Division in Dolby v Beko (UPC_CFI_135/2024, decision of 18 March 2026, paras. 458 et seq.), according to which "*a dominant position within the meaning of Article 102 TFEU may arise where it is not realistically possible to market the relevant product, such as smart televisions complying with a common standard, without obtaining a licence to the patent in suit. Consumers expect standard-compliant televisions to incorporate all audio and video codecs commonly used for encoding"*.
302. Therefore, products that do not implement the HEVC standard cannot remain commercially competitive, having regard to the findings of the Regional Court and the Higher Regional Court of Düsseldorf cited above (Exhibits ASU-342-H5 and ASU-342-H6), according to which the proprietor of an HEVC standard-essential patent holds a dominant position because no equivalent alternatives are available on the market.
303. As observed by ASUSTeK, the HEVC video codec at issue does not concern a niche market. Indeed, video content encoded in accordance with the HEVC standard is widely used, including by streaming providers such as Netflix, Amazon Prime and Disney+. ASUSTeK could not realistically market devices that do not support all widely used and commercially relevant video decoding standards available on the market, therefore including the HEVC standard, without materially impairing the competitiveness of its products. Any such limitation would expose ASUSTeK to a significant risk of losing substantial market share, as customers reasonably expect devices to be capable of processing content encoded in all commonly used video formats.

304. It must therefore be concluded that Ericsson holds a dominant position, since it is able to behave to an appreciable extent independently of its competitors and customers.
305. In light of all the foregoing considerations, the Court considers it entirely reasonable to conclude that products which do not implement the HEVC standard are unable to remain commercially competitive.

8.4. Consequences of Ericsson's dominant position

306. As to the consequences of the Court's assessment of Ericsson's dominant position on the relevant market, the Court makes the following observations.
307. European Union law and the Huawei v ZTE judgment are applicable (see the UPC decisions referred above).
308. Accordingly, the conduct of the parties must be assessed in light of the procedural steps laid down by the Court of Justice and subsequently interpreted by the UPC, taking into account the specific circumstances of the case and the parties' overall conduct (see CJEU, 27 March 2012, *Post Danmark I*, C-209/10, ECLI:EU:C:2012:172, para. 26). The assessment must therefore have regard to the parties' overall conduct and must not be confined solely to determining the respective licensing terms (see Hamburg Local Division, UPC_CFI_494/2025 UPC_CFI_1128/2025, mentioned above, para 226-227, 230).
309. The five procedural steps laid down by the Court of Justice in Huawei v ZTE must be followed in their strict chronological sequence (see paras. 55 and 60 of the judgment). In particular, the UPC case law has likewise emphasised that: *"According to the ECJ, before filing an action for an injunction, the SEP holder must first notify ("alert") the patent user of the alleged patent infringement. In doing so, the holder must identify the patent in question and specify how it is alleged to have been infringed (ECJ, loc. cit., para. 61, para. 71)* (see Hamburg Local Division, UPC_CFI_494/2025 UPC_CFI_1128/2025, mentioned above, para 231):
310. The obligation imposed on the proprietor of an SEP applies only where the patent proprietor seeks a prohibitor injunction or the recall of products against the alleged infringer (see para. 54 of the Court of Justice's Judgment in *Huawei v ZTE*).

As regards the obligation to provide infringement notice prior to the commencement of proceedings

311. According to the ECJ, before bringing an action seeking an injunction, the SEP holder must first notify the patent user of the alleged infringement.
312. In particular, the SEP holder must identify the patent concerned and specify how it is alleged to have been infringed (CJEU, Huawei v ZTE, para. 61; see also Mannheim Local Division, UPC_CFI_86/2025, decision of 16 June 2026, InterDigital v The Walt Disney Company et al*).*
313. The infringement notice must provide sufficient information to enable the implementer to understand and assess the infringement allegation before deciding whether to enter into a licence agreement.

314. Ericsson did not comply with that requirement before bringing the present action, since it had not identified the patent allegedly infringed and specified how it was alleged to have been infringed. It did so only on 14 June 2024, the same day it lodged its Statement of Claim and subsequently sought to remedy that omission in the course of the proceedings by requesting a conditional injunction, initially subject to a deadline in October 2024 and subsequently to a deadline in December 2024.

315. Ericsson nevertheless submits that:

[redacted]

- ✓ ASUSTeK acted in bad faith during the negotiations, which had begun in 2003, and Ericsson was therefore not required to provide prior notice of infringement. Ericsson contends, in particular, that proceedings were brought against it in the United States on the basis of an unfounded claim which ASUSTeK had encouraged Celerity, ATL and Innovative Sonic to pursue;
- ✓ On the one hand, ASUSTeK submits that it has no control over the patent portfolio, which is held and managed exclusively, under various legal arrangements, by Celerity, ATL and Innovative Sonic. On the other hand, ASUSTeK has demonstrated its ability to coordinate, in a unified manner, the litigation strategy of those very entities, culminating in the jointly pursued multi-million-dollar proceedings referred to above in the United States. This inconsistency undermines the credibility of ASUSTeK's position and supports the conclusion that its conduct has not been guided by good faith;
- ✓ in any event, the negotiations preceding the commencement of the present proceedings demonstrated that ASUSTeK was not a willing licensee;
- ✓ Ericsson lodged the judgment delivered in the United States proceedings on 17 September 2026;
- ✓ it sought an injunction conditional upon ASUSTeK accepting the proposed licence, initially by 1 October 2024 and subsequently by 1 December 2024. Ericsson therefore submits that, in substance, it complied with the first requirement laid down in Huawei v ZTE;
- ✓ in that regard, Ericsson relies on the decision of the Mannheim Local Division in UPC_CFI_210/2023, paragraphs 194 and 195, cited above. That decision adopts a position differing from that taken by the European Commission in its *amicus curiae* observations of 15 April 2024, submitted in the proceedings before the Munich Higher Regional Court, Case No 020078-24 MLO/DLF, according to which the relevant information must be included in the notice given before proceedings seeking an injunction are commenced.

316. ASUSTeK submits that:

- ✓ it did not receive, before the commencement of the proceedings, any notice identifying the patent allegedly infringed, setting out the relevant technical details and specifying the proposed royalty. Ericsson's conduct is therefore abusive;

[redacted]

- ✓ Ericsson discontinued the negotiations in 2022.

317. The Court observes as follows.

318. In the present case, the notice required by the Court of Justice from the SEP holder was not given before the commencement of the proceedings. In this regard, reference may also be made to paragraph 43 of the European Commission's *amicus curiae* observations of 15 April 2024, according to which the purpose of the framework established by the judgment in Huawei v ZTE is to prevent, on the one hand, an SEP holder from seeking injunctive relief without first affording the implementer an opportunity to conclude a licence on FRAND terms and, on the other hand, an implementer from relying on a compulsory licence defence without having constructively engaged in licensing negotiations.

319. The UPC case law relied upon by the parties' concerned situations in which such notice had in fact been given. In UPC_CFI_9/2023, LD Munich, decision of 18 December 2024, Huawei v Netgear, for example, Huawei had notified the alleged infringement before commencing proceedings and had also provided claim charts relating to the patent in suit.

320. Ericsson did not provide any details concerning its HEVC SEPs, nor did it initiate concrete licensing negotiations before bringing the present action before the UPC.

321. [redacted]

[redacted]



329. In conclusion, Ericsson failed to comply with the first step laid down in Huawei v ZTE. The Patent Proprietor did not provide adequate notice of the alleged infringement and did not afford ASUSTeK an opportunity to enter into negotiations before commencing the infringement proceedings.
330. That omission cannot be remedied at the same time as, or after, the commencement of proceedings seeking an injunction or the recall of products from the channels of commerce.
331. In that regard, it should be recalled that CJEU held that notice of the alleged infringement must be given before an action seeking such relief is brought (see footnote 127).
332. According to a more formal interpretation, which is more favourable to Ericsson, compliance must occur before the point at which the commencement of the proceedings is no longer under the Claimant's control. In the present case, that point was reached on 14 June 2024, when the Statement of Claim was lodged with the UPC Registry, since service of the Statement of Claim is carried out by the Registry.

333. According to a more purposive interpretation, having regard to the objective pursued by the Court of Justice in Huawei v ZTE, notice must be given sufficiently in advance to enable a willing implementer to express a genuine willingness to enter into a FRAND licence.
334. Under either interpretation, that requirement was not satisfied in the present case.
335. Nor can that obligation be regarded as dispensed with merely because the ITU registers are publicly accessible.
336. According to certain interpretations, however, that requirement may not need to be fulfilled where the undertaking in a dominant position can demonstrate that the counterparty acted in bad faith. The burden of proving such bad faith rests on the dominant undertaking. This is precisely Ericsson's position. It contends that ASUSTeK acted in bad faith both during the negotiations and, above all, by initiating the proceedings in the United States.
337. The question therefore arises whether the Court may conclude that ASUSTeK acted in bad faith in connection with litigation that did not concern the technology at issue in the present proceedings, with the consequence that Ericsson was not required to provide the notice prescribed by *Huawei v ZTE* before commencing the present action.
338. Similarly, the question arises whether a principle of reciprocity may be inferred, such that, where the SEP implementer itself initiates litigation in bad faith, as Ericsson alleges occurred in the United States proceedings, the framework established by *Huawei v ZTE* ceases to apply. This issue will be addressed in greater detail at paragraphs 343 et seqq.
339. Alternatively, it may be concluded that, since Ericsson failed to comply with the first requirement laid down by the Court of Justice, there is no need to examine the subsequent steps of the *Huawei v ZTE* framework, since the initial obligation imposed on a dominant SEP holder was not satisfied.
340. Accordingly, Ericsson failed to comply with its obligation to identify specifically the patent allegedly infringed and to specify the manner in which it was alleged to have been infringed, before placing the implementer under the threat of an injunction.
341. A request for a conditional injunction does not constitute an adequate substitute for the notice required before the commencement of proceedings seeking injunctive relief.
342. Moreover, the negotiations referred to above did not involve Arvato.

Objective justification
343. Finally, in the alternative, Ericsson submitted that its conduct was objectively justified, even if it were found to hold a dominant position and to have failed to comply with the procedure laid down by the Court of Justice in *Huawei v ZTE.* According to Ericsson, the initiation of proceedings before the UPC without prior notice to ASUSTeK was justified by the need to defend itself against the litigation brought against it in 2023, when ASUS Technology Licensing Inc. (ATL) and Celerity IP, LLC, allegedly encouraged by ASUSTeK, brought patent infringement proceedings in the United States concerning US Patent No 10,951,359 against AT&T (Case No 2:23-cv-00486-JRG-RSP before the United States District Court for the Eastern District of Texas).

344. Ericsson thus contends that the proceedings brought before the Milan Local Division constituted a defensive response aimed at restoring the balance between the parties in the context of the ongoing global licensing negotiations.
345. In this regard, however, the Court observes that, as recalled by the European Commission in Communication C (2026) 6118 of September 2026: "*Conduct that distorts effective competition may escape the prohibition laid down in Article 102 TFEU where it is objectively justified (414). To be objectively justified, the conduct must either be objectively necessary ('objective necessity defence') or produce efficiencies that counterbalance, or even outweigh, the negative effect of the conduct on competition ('efficiency defence') (415). An objective necessity defence is generally based on an overriding reason that can justify the implementation of a conduct that distorts effective competition. Such a reason may relate to the need to protect the dominant undertaking's legitimate interests, or, in certain circumstances, it may relate to the pursuit of a public health, safety or other public interest objective (see Section 5.2 below). An efficiency defence, on the other hand, is based on a claim that the conduct enables the dominant undertaking to compete more effectively on price, quality, innovation or choice and thereby produce benefits for consumers which counterbalance or outweigh the distortion of effective competition caused by the conduct (see Section 5.3 below)".*
346. In the present case, Ericsson has not put forward any objective, as opposed to subjective, circumstances capable of demonstrating that its conduct gives rise to efficiencies on the relevant market which would counterbalance, or even outweigh, its negative effects on competition. For example, no technical justifications have been put forward, such as the need to maintain or improve the performance of the dominant undertaking's product, nor has it been argued that the conduct pursues a genuine and objectively defined public-interest objective (see paragraphs 209 and 210 of the above-mentioned European Commission Communication of 3 September 2026).

8.5. Conclusion

347. In conclusion, the FRAND defence is well founded, since Ericsson, which holds a dominant position on the relevant market, failed to comply with the negotiation procedure laid down by the Court of Justice before bringing proceedings seeking an injunction.
348. Having established that Ericsson is obliged to grant a licence on FRAND terms directly under Article 102 TFEU, the Court need not examine whether such an obligation also arises from the second source relied upon, namely Ericsson's declaration to the ITU (see paragraph 255 above).

9. Remedies

9.1. Declaration of essentiality of the patent in relation to the HEVC/H.265 standard

349. For the reasons set out in section 6 of this decision, the claim seeking a declaration that the patent is essential to the HEVC/H.265 standard, as the principal claim, must be dismissed.

9.2. Declaration of infringement

350. In the light of the judgment of the Court of Justice in Huawei v ZTE cited above, the Court observes that a successful FRAND defence does not preclude the patent proprietor from seeking a declaration of infringement (see paragraph 76 and point 2 of the operative part of that judgment).

351. In that regard, the Defendants did not object to such a declaration, provided that the products at issue are sufficiently identified. ASUSTeK nevertheless contends that the products have not been identified with sufficient precision and that any order should precisely identify the products concerned products that are merely "HEVC-compatible", which require the installation of additional software by the user.

352. Ericsson replies that the products were sufficiently specified in paragraph 1.7 of the Statement of Claim and in paragraph 16 of the Reply.
353. In the Statement of Claim, Ericsson stated, in particular, that: "*These all concern products that are compatible with the HEVC/H.265 standard and therefore contain Ericsson's proprietary standard essential technology, including that of the Patent in suit. ASUS' products that infringe the Patent are therefore computers, components and modules thereof manufactured by or on behalf of ASUS (the "Infringing Products"). On information and believe, those products utilize industry standard video coding technology. The Infringing Products include, but are not limited to, ASUS' laptops, desktops and chrome book computers that implement the HEVC/H.265 standard (see Annex A5 and Annex A6)*.

354. The Court considers that the products at issue have been sufficiently identified in paragraph 1.7 of the Statement of Claim and paragraph 16 of the Reply.

9.3. Declaration pursuant to Article 2(7)(a) of Regulation (EU) no. 608/2013

355. ASUSTeK considers that such a declaration is not available under Article 32(1), 64 and 56(1) UPCA. This declaration would be too vague.
356. Ericsson replied, considering that such a declaration is available pursuant to Articles 24(1)(a) and 65 UPCA.
357. The Court considers that the products found to infringe have been sufficiently identified in paragraph 354 above. A declaration of infringement cannot extend to products that are merely suspected of infringement, in respect of which the UPCA provides only for provisional and protective measures under Article 63(3) UPCA. The declaration sought by the Claimant is specific to the scheme established by Regulation (EU) No 608/2013 for customs enforcement. The qualification of goods as goods suspected of infringing an intellectual property right is a concept pertaining to customs proceedings and does not constitute a remedy available under the UPCA. Since the Court has already determined the issue of infringement, the requested declaration would not produce any legal effects beyond those resulting from the present judgment. The request must therefore be dismissed.

9.4. Injunction

358. In light of the CJEU's judgment in Huawei v ZTE, a well-founded FRAND defence precludes the grant of the relief sought by the patent proprietor.

9.5. Declaration of liability for damages

359. ASUSTeK further submitted that Article 64 UPCA does not, as such, provide for a declaration that the defendant is liable for damages and that, in any event, any claim for damages in respect of acts committed before 2019 is time-barred pursuant to Article 72 UPCA.

360. The defendant further contended that the amount of damages cannot exceed the FRAND royalty that would have been payable. In determining any damages, account must also be taken of the fact that the opposing party does not itself place the products at issue on the market, as well as the declaration made to the ITU.

361. Ericsson replied that Article 64 UPCA provides a legal basis for a declaration that the defendant is liable for damages. It further submitted that Article 72 UPCA concerns the time limit for bringing an action and does not provide for a limitation period in respect of claims for damages. According to Ericsson, the defendants do not dispute causation, and the amount of damages is not capped at the level of a FRAND royalty.

362. The Court refers in this respect to the CJEU's judgment in Huawei, in which the Court held that "*Article 102 TFEU must be interpreted as not prohibiting, in circumstances such as those in the main proceedings, an undertaking in a dominant position and holding a patent essential to a standard established by a standardisation body, which has given an undertaking to the standardisation body to grant licences for that patent on FRAND terms, from bringing an action for infringement against the alleged infringer of its patent and seeking the rendering of accounts in relation to past acts of use of that patent or an award of damages in respect of those acts of use"* (see point n. 2 of the operative part).

363. Accordingly, a FRAND defence, even where well founded, as in the present case, does not preclude the patent proprietor from bringing a claim for damages.

364. As regards the determination to be made in the present proceedings, it should be recalled that this Court has already had occasion to clarify, in an infringement action, (see UPC CFI no. 9/2024, RD Nordic Baltic, decision of 31 July 2025) that "*The Court finds that the request to only decide on damages in principle shall be granted. Thus, the amount of the damages shall be determined in the subsequent proceedings under Rule 125 et seq. RoP. In this situation, also the time periods to be taken into account shall be determined in the subsequent proceedings. The relevant time periods and the potential application of national legislation that may affect the right to damages will depend on information referred to in Article 67 UPCA, which only will be made available to the claimant after the decision on the merits. Hence, the declaration of right to damages shall not specify the time periods to be taken into account"* (cf. e.g. Local Division Mannheim, decision of 11 March 2025, UPC_CFI_159/2024, paragraphs 103, 104 and 115–118).

365. Accordingly, in the present case, the Court needs only to establish ASUSTeK's liability for damages, without determining at this stage either the relevant period to be taken into account or the amount of damages.
366. As regards Arvato, it suffices to recall that Ericsson expressly dropped its claim seeking a finding of liability against that defendant during the course of the proceedings.

9.6. Request for information

367. Ericsson requested that an order to provide information be made against both Defendants.
368. The Defendants submitted that Arvato, as an intermediary, is not required to provide information; that the information provided by ASUSTeK would be sufficient; that the information should be limited to the period from 2019 onwards, in respect of which damages may be claimed; and that only information concerning the number of products should be provided.
369. Ericsson replied that Arvato is also required to provide information pursuant to Article 67 UPCA; that the Court may also order third parties to provide information pursuant to Article 67(2)(a) UPCA; that damages are not limited to a FRAND royalty, as follows from Article 68(3)(b) UPCA; that Article 72 UPCA does not lay down a five-year limitation period for damages claims; and that it requires the relevant information from Arvato as well, even if the same information may also be obtained from ASUSTeK.
370. The Court considers, as a preliminary point, that a FRAND defence, even where well founded, does not preclude the patent proprietor from seeking an order to provide information, as clarified by the CJEU in paragraph 74 of its judgment in Huawei v ZTE.
371. Furthermore, that remedy also extends to the intermediary, Arvato, pursuant to Article 67 UPCA.
372. As a matter of precaution, the obligation to provide information should cover the entire period from the grant of the Patent to the present date- i.e. starting from 29 June 2016 - without prejudice to the determination, in the subsequent proceedings under R. 125 et seq. RoP, of the relevant period for which damages may be awarded.

9.7. Publication on the websites of ASUSTeK and Arvato

373. Ericsson requested that the Court's decision be published on the websites of ASUSTeK and Arvato.
374. ASUSTeK, by contrast, submitted that there is no legal basis for such a remedy and that a legitimate interest is required.
375. Ericsson replied that such a measure is provided for under Articles 64(1) and 80 UPCA. It further submitted that no legitimate interest is required in that regard, it being necessary and sufficient that the measure be appropriate. The Defendants have not demonstrated any exceptional legitimate interests justifying refusal.
376. The Court considers that, in the present case, publication of the decision is not an appropriate measure, having regard, in particular, to the considerations set out in previous UPC case law concerning SEP disputes involving a FRAND defence. ("*The request for publication of the decision is dismissed. Despite the severity and continuity of Defendants infringement without*

taking a licence or placing a security, FRAND cases are closely watched by the legal community, and Defendant is a very prominent participant in court proceedings, nationally as internationally. Hence, any decision in the present case is already granted some publicity, which sufficiently ensures Claimant's interests" ; see Hamburg Local Division, decision of 24 August 2026, UPC_CFI_494/2025 and UPC_CFI_1128/2025).
377. Furthermore, the present decision will be published on the UPC's official website and will therefore be accessible to all interested market operators.
378. Finally, the additional measure sought is not appropriate in the present case, since there is no need to remedy the effects of incorrect information provided to the public in relation to the present dispute (see Düsseldorf Local Division, decision of 11 February 2026, UPC_CFI_351/2024 and UPC_CFI_595/2024), such as would make it necessary or appropriate to issue a rectification for the benefit of end consumers through communications to the market going beyond publication on the UPC's CMS.

9.8. Recall and destruction of infringing products

379. Ericsson requested the recall and destruction of the infringing products.
380. The Defendants opposed that request. In particular, Arvato submitted that, as an intermediary, it is not subject to such measures, while ASUSTeK submitted more generally that the measures sought would be disproportionate and would cause irreparable harm to the Defendants' interests.
381. The Court considers that, in light of the CJEU's judgment in Huawei v ZTE, the fact that the FRAND defence is well founded precludes the grant of the recall and destruction measures sought by the patent proprietor (see point 2 of the operative part and paragraph 55 of that judgment).

9.9. Penalty payment for each breach and non-compliance with the order

382. Ericsson requested the Court to impose a penalty payment of EUR 250,000 for each breach of or failure to comply with the order, EUR 100,000 for each day of continued infringement, and EUR 5,000 for each infringing product.
383. ASUSTeK submitted that there are no grounds for granting such a penalty payment and that the amounts sought are unreasonable and unsupported.
384. Ericsson submitted that the infringement is ongoing and that the imposition of a penalty payment is therefore justified. It further argued that the amounts sought are reasonable, that Ericsson is not required to provide specific justification for those amounts, and that the Court may reduce them of its own motion.
385. The Court observes that, in the present case, the penalty payment is intended solely to ensure compliance with the order to provide information, since the requests for an injunction and for recall of the products from the channels of commerce have not been granted.
386. Accordingly, since the penalty payment is limited to securing compliance with the order to provide information, the Court considers it appropriate to impose a penalty payment only for

each day of non-compliance, in the amount of EUR 1,000 for each day of delay, up to a maximum amount of EUR 1,000,000, having due regard to the value of the infringement action.

9.10. Enforceability

387. ASUSTeK requests, pursuant to R. 9 RoP, that enforceability be stayed pending the defendants' application for permission to appeal, so that the appeal may have suspensive effect (Article 74(1) UPCA).
388. Ericsson requests dismissal of the R. 9 RoP application because it is unsubstantiated and was not formally filed in the CMS; enforceability is common practice and suspensive effect is the exception; Article 81(1) UPCA confers such discretion on the Court, whereas Article 74 UPCA provides that an appeal does not normally have suspensive effect.
389. The Court considers that the decision should be declared immediately enforceable, being the general rule. The Court sees no reasons that would justify a departure from that ordinary regime.

9.11. Defendants' counterclaims

390. The counterclaim for Revocation is dismissed, as well as the request for entry of the Court's decision in the EPO Register.
391. Regarding the request on legal costs and other expenses, the Defendants' request for an interim award of costs in the amount of EUR 100,000 is dismissed.

10. Value of the case and legal costs

392. At the conclusion of the interim conference, the Court provisionally set the value of the infringement action at 1,000,000 EUR and that of the counterclaim for revocation at 1,000,000 EUR.
393. The Court confirms the value of the case as determined by the judge-rapporteur.
394. Article 69(1) UPCA provides that, as a general rule, reasonable and proportionate legal costs and other expenses incurred by the successful party shall be borne by the unsuccessful party, unless equity requires otherwise.
395. Article 69(2) UPCA further provides that, where a party succeeds only in part, or in exceptional circumstances, the Court may order that costs be apportioned equitably or that each party bear its own costs.
396. In the present case, under the scale of ceilings for recoverable costs adopted by the Administrative Committee on 24 April 2023 pursuant to R. 152.2 RoP, the ceiling applicable to cases with a value of up to 2,000,000 is 200,000 EUR. Accordingly, the ceiling for recoverable costs in the present infringement action and counterclaim for revocation is fixed at 200,000 EUR in total.
397. The Parties clarified during the oral hearing that in the present case they agree that the ceiling also covers the costs incurred in connection with (i) the application for provisional measures brought by Ericsson during the main proceedings and (ii) the proceedings under

R. 262A RoP concerning the confidentiality regime applicable in the present case, including the appeal proceedings.
398. In this respect, during the oral hearing, the parties stated that they were prepared to accept a decision of the Court attributing to the procedural activities referred to under points (i) and (ii) above a share corresponding to one quarter of the overall costs.
399. The Court considers that the Defendants should bear 67,50% of the costs of the proceedings, for the following reasons.
400. First, having regard to the proceedings for provisional measures and to the complex issues addressed in the proceedings under R. 262A RoP, which raised issues of broader significance, the Court considers that the parties correctly assessed the share of the overall costs attributable to those proceedings at one quarter.
401. Second, Ericsson was unsuccessful in the proceedings for provisional measures and for review and appeal on the confidentiality regime. The Claimant must therefore bear the corresponding one quarter of the costs, amounting to 50,000 EUR out of the applicable ceiling of 200,000 EUR.
402. Third, as regards the proceedings on the merits, Ericsson was substantially successful. It prevailed on the counterclaim for revocation and on the infringement action as regards the majority of the relief sought, with only some of its claims being dismissed, particularly the request for an injunction and the request for recall of the infringing products from the channels of commerce.
403. Accordingly, of the remaining three quarters of the costs, corresponding to 150,000 EUR, the Court considers it equitable to apportion 10% between the parties by ordering each party to bear its own costs to that extent, and to award Ericsson 90% of the remaining amount. This corresponds to 67,50% of the overall recoverable costs, namely a maximum amount of 135,000 EUR.

404. Ericsson requests an interim award of costs in the amount of 100.000 EUR corresponding to 50% of the applicable ceiling.
405. The Court of Appeal has held that "*as a general rule, Article 69(1) UPCA and R. 150(2) RoP do not entitle the successful party to an interim reimbursement of representation costs of more than 50% of the ceiling of recoverable costs as adopted by the Administrative Committee under R. 152.2 RoP.* [...] *In general, the Court may assume that the successful party will be entitled to 50% of the applicable ceiling and may order reimbursement of that amount by means of an interim award, unless there are clear indications that the successful party in fact incurred fewer representation costs or that 50% of the applicable ceiling is more than what would be reasonable or proportionate in the particular circumstances of the case. At the same time, as a general rule, the Court cannot assume that the successful party is entitled to more than 50% of the applicable ceiling before the conclusion of the cost proceedings according to Chapter 5 of Part 1 RoP. An exception may apply if parties have submitted and discussed cost specifications during the proceedings or have agreed on the costs to be reimbursed*" (see UPC CoA no. 457/2024, paras nn. 203–204).

406. Applying those principles, the Court considers that Ericsson is entitled to an interim award corresponding to 50% of the overall recoverable costs, namely 67,500 EUR.
407. There is no indication that Ericsson incurred lower representation costs or that that amount would be unreasonable or disproportionate in the circumstances of the present case. On the contrary, the complexity of the case and the considerable procedural work undertaken justify an interim award in the amount requested by the successful party.
408. The remaining recoverable costs shall be determined in separate cost proceedings pursuant to R. 150 et seq. RoP.

DECISION

The Unified Patent Court, Court of First Instance, Milan Local Division decides as follows:

1. the request to declare in principle that EP 2 727 342 B1 is essential to the HEVC/H.265 standard is dismissed for lack of jurisdiction;
2. declares that the Defendants, individually and jointly, indirectly infringe the Patent, each in respect of its respective conduct as set out in the statement of facts and in particular:
   - ASUSTeK Computer Inc. by making, offering, placing on the market and/or using the Infringing Products as well as by importing or storing the Infringing Products (or components thereof) for those purposes and/or by supplying or offering to supply the Infringing Products (or components thereof) to persons who are not entitled to exploit the Patent in the UPC Member States in which the patent is in force;
   - Arvato Netherlands B.V. by acting as intermediary whose services are being used by ASUSTeK Computer Inc. to infringe a patent;
3. declares that ASUSTeK Computer Inc. is liable for the damage suffered by Telefonaktiebolaget LM Ericsson as well as any future damage Telefonaktiebolaget LM Ericsson will incur as a result of the continuous infringement of the Patent;
4. orders the Defendants, within four weeks of Ericsson's request for enforcement pursuant to Rule 118.5 RoP of the judgment to be rendered in these proceedings, to provide counsel for Telefonaktiebolaget LM Ericsson with a written statement, supported by appropriate documentation and prepared and signed by an independent auditor or another professional whom the Court considers suitably qualified for that purpose, setting out the following:
   (i) the origin and distribution channels of the Infringing Products including the full names and addresses of the legal entities that are involved in the manufacture of and trade in UPC Member State in which the patent is in force;
   (ii) the total number of the Infringing Products that the Defendants and/or any of their affiliates still have in stock either administratively or physically in the relevant Contracting Member States as of the date of judgment;
   (iii) the total number of the Infringing Products that the Defendants, including any of its affiliates, have traded, sold, supplied, transferred and/or delivered to its customers and / or distributors in the relevant Contracting Member States as of 29 June 2016, as well as any and all copies of invoices pertaining to those acts which also shows the price obtained for these products;

(iv) the identity including the full names and address of any non-consumer third person involved in the relevant Contracting Member States in the production, distribution, trade and/or sale of the Infringing Products or in the use of the Infringing Products as of 29 June 2016;

(v) the internal costs calculated, or the purchasing costs paid, as well as the sales prices charged for the Infringing Products in the relevant Contracting Member States by the Defendants, including their affiliates, as of 29 June 2016;

(vi) the total amount of net profit which the Defendants, including their affiliates, have gained as a result of trading the Infringing Products in the relevant Contracting Member States as of 29 June 2016 or another date to be determined by this Court, and the calculation thereof;

5. in case of any violation of the orders in section 4, orders the respective Defendant to pay a penalty payment of EUR 1,000 per day for each day of non-compliance in the event of any violation of the order under this section, up to a maximum amount of EUR 1,000,000;
6. all further requests of the Claimant are dismissed;
7. the counterclaim for revocation is dismissed;
8. the value in dispute (for the counterclaim for revocation and infringement) is a set as EUR 2,000,000;
9. declares the ceiling of recoverable representation costs set at a total of EUR 200,000 for the infringement action and the counterclaim for revocation;
10. orders the Defendants to bear a 67,50% share of the costs of the proceedings;
11. orders the Defendants to pay Telefonaktiebolaget LM Ericsson, by way of an interim award of costs, an amount of EUR 67,500 within 14 days of service of this decision;
12. declares this judgment immediately enforceable.

Milan, 6 November 2026.

Pierluigi Perrotti presiding judge	Digitally signed Perrotti Pierluigi 2026-11-05 19:32:21 +0100 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet
Alima Zana legally qualified judge and judge-rapporteur	ALIMA ZANA Firmato digitalmente da ALIMA ZANA Data: 2026.11.05 18:18:05 +01'00'
Rute Lopes legally qualified judge	RUTE ALEXANDRA DA SILVA SABINO LOPES Assinado de forma digital por RUTE ALEXANDRA DA SILVA SABINO LOPES Dados: 2026.11.05 16:26:25 Z
Christoph Norrenbrock technically qualified judge	Digitally signed Dr. Norrenbrock Christoph Robert 2026-11-05 14:25:49 +0100 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet

for the Deputy Registrar	Digitally signed Ferretti Maddalena 2026-11-06 08:57:04 +0100 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet

INFORMATION ABOUT APPEAL

An appeal against the present Decision may be lodged at the Court of Appeal, by any party which has been unsuccessful, in whole or in part, in its submissions, within two months of the date of its notification (Article 73 UPCA, R. 220.1(a), 224.1(a) RoP).

INFORMATION ABOUT ENFORCEMENT

An authentic copy of the enforceable decision or order will be issued by the Deputy Registrar upon request of the enforcing party, R. 69 RegR. (Article 82 UPCA, Article 37.2 UPCS, R. 118.8, 158.2, 354, 355.4 RoP).