COURT OF FIRST INSTANCE
MILAN LOCAL DIVISION

UPC CFI no. 319/2024, no. 728/2024
DECISION
delivered on 6 November 2026

HEADNOTES

1. Having regard to Art. 84 EPC and Art. 123(3) EPC, the requirement of legal certainty disallows the introduction of an evident lack of clarity into the patent claims if this lack is suitable to create variable scopes of protection depending on selective limiting effects that could be derived from the description without excluding a violation of Art. 123(3) EPC.
2. A document uploaded to a standardisation body's document-management server is available to the public where at least one member of the public could obtain access without being bound by an express or implicit obligation of confidentiality. The applicant's own identification of the upload date as the publication date may corroborate public availability but does not dispense with the assessment of access and confidentiality.

CLAIMANT AND COUNTERDEFENDANT
TELEFONAKTIEBOLAGET LM ERICSSON
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represented by
Wim Maas, David Mulder and Sebastien Versaevel, at *Winston Taylor N.V.*, Paranassusweg 803-805a, 1082 LZ Amsterdam, The Netherlands

DEFENDANTS
1) ASUSTEK COMPUTER INC
1 F No. 15 Lide Rd Beitou Dist, Taipei 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 PartG mbB*, Fischerstraße 2, 40477 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 3 076 673 entitled "*Decoding and encoding of pictures of a video sequence*"

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

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

LANGUAGE THE PROCEEDINGS
English

SUBJECT-MATTER OF THE PROCEEDINGS
Infringement action, FRAND defence and counterclaim for revocation

DATE OF THE ORAL HEARING
24 - 25 September 2026

1. Summary of facts

a) The parties involved in the dispute

Telefonaktiebolaget LM Ericsson

1. Telefonaktiebolaget LM Ericsson ("Ericsson"), the Claimant in the infringement action and the defendant in the counterclaim for revocation, is a company incorporated under the laws of the Kingdom of Sweden, with its principal place of business in Stockholm.
2. Ericsson is active in the telecommunications sector and holds a substantial worldwide patent portfolio resulting from its research and development activities in mobile communications and multimedia technologies.
3. For the purposes of the present dispute, Ericsson submits that a significant part of its research activities concerns video-coding technologies used in the High Efficiency Video Coding standard ("HEVC/H.265").
4. The HEVC/H.265 standard was first released in 2013 as the successor to the Advanced Video Coding standard ("AVC/H.264"). According to Ericsson, HEVC/H.265 provides approximately twice the coding efficiency of AVC/H.264, enabling higher-quality and higher-resolution video to be decoded using the same bandwidth.
5. Ericsson further submits that it owns standard-essential patents ("SEPs") implemented in, and necessary for compliance with, the HEVC/H.265 standard.
6. Ericsson is the sole proprietor of European patent EP 3 076 673 B1 ("EP '673" or "the Patent"), entitled "*Decoding and encoding of pictures of a video sequence*". Ericsson contends that the Patent is essential to the HEVC/H.265 standard and that it is infringed by the Defendants.

The ASUS Group

7. ASUS is the name of a group of companies engaged in the design, manufacture, distribution and sale of consumer-electronics products, including computers, components and modules implementing video-decoding technologies. The group operates worldwide and places its products on the market in several UPC Contracting Member States, including Italy and the Netherlands.

ASUSTeK Computer Inc.

8. ASUSTeK Computer Inc. ("ASUSTeK"), defendant in these proceedings, is the parent company of the ASUS group. It was founded in 1989 and has its registered office in Taiwan. ASUSTek markets laptops, notebook and desktop computers, computer components such as graphics cards, and a limited range of smartphones and tablets. Most ASUS-branded personal computers do not include cellular functionality.
9. ASUSTeK is the registered owner of www.asus.com, which, according to Ericsson, is the distribution channel through which the products alleged to infringe the Patent are offered.
10. Ericsson submits that ASUSTeK coordinates and directs the activities of the subsidiaries and affiliated entities involved in the manufacture, marketing and distribution of ASUS-branded products worldwide.

Arvato Netherlands B.V.

11. Arvato Netherlands B.V. ("Arvato") is a logistics and warehousing company established in the Netherlands and is not part of the ASUSTeK group. According to the Defendants, when a customer purchases an ASUS-branded product through www.asus.it, Arvato's role is limited to storing the product at its warehouse in the Netherlands and arranging for its collection and delivery to the customer by a third-party carrier.

b) The accused products

12. The products at issue comprise ASUS 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 HEVC/H.265 video-decoding functionality. Ericsson refers to ASUS computers, components and modules manufactured by or on behalf of ASUS and compatible with the HEVC/H.265 standard as the "Infringing Products".

c) The alleged acts of infringement

13. Ericsson alleges that the Defendants have directly and/or indirectly offered, marketed, used, imported and supplied products compliant with the HEVC/H.265 standard in the relevant Contracting Member States, thereby infringing EP '673.

d) The proceedings

14. On 14 June 2024, Ericsson lodged its statement of claim, commencing an infringement action concerning EP '673. 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.
15. 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.
16. On 13 September 2024, Ericsson lodged an application for leave to amend its claim, followed by a second application on 30 September 2024.
17. 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.
18. By order of 21 October 2024, the Court granted the joint application in full.
19. 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.
20. 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.

21. 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.
22. 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).
23. 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.
24. Pursuant to R. 32 RoP, the written procedure closed on 27 November 2025, when the Defendants lodged their Rejoinder to the Reply to the application to amend the Patent.
25. On 23 December 2025, Ericsson requested that the dates of the interim conference and the oral hearing be fixed.
26. 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.
27. 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.
28. 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.
29. The judge-rapporteur held the interim conference on 29 April 2026.
30. By order of 25 May 2026, the judge-rapporteur dismissed Ericsson's application under R. 190 RoP.
31. The oral hearing was held on 24 and 25 September 2026.
32. In view of the close connection between these proceedings and the parallel action UPC CFI no. 318/2024 - 730/2024, 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.

33. 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.
34. Reference is made to the hearing record for a full account of the parties' submissions on this issue.
35. 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 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 3 076 673 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 3 076 673 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

36. Ericsson is the sole proprietor of EP'673, the patent at issue, entitled "*Decoding and encoding of pictures of a video sequence*". The Patent results from a divisional application originating from an international application under the Patent Cooperation Treaty filed on 26 September 2013 and published on 3 April 2014 as WO 2014/049066 A1 (Parent Application), and claiming priority of US application 201261706869 P dated 28 September 2012 (Priority Document).
37. The grant of the Patent at issue was published on 1 March 2017 under the number EP 3 076 673 B1 and - according to the Claimant's statement - is currently in force in the following UPC member States: Denmark, Germany, France, Italy, the Netherlands and (as of 1.9.2024) Romania.
38. No valid opposition was filed with the EPO.
39. EP'673 has been initially opted out on 23.5.2023. The opt out was then withdrawn on 13.6.2024.

40. The AVC/H.264 standard has been the industry standard for video compression for many years. However, with the increasing need for higher resolution and better video quality, a more efficient compression standard was required. This led to the development of the HEVC/H.265 standard, which was standardized by the International Telecommunication Union – Telecommunications sector ("ITU-T") and the Moving Picture Experts Group ("MPEG").
41. 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 HEVC/H.265 standard aims to provide better compression ratios, reducing the file sizes of encoded videos without compromising visual quality.

42. For the purpose of understanding the technology at issue, it is useful to recall certain basic principles of video encoding and decoding that are common to both the AVC/H.264 and HEVC/H.265 standards.
43. Video compression reduces the amount of data required to store or transmit video content. It comprises two principal operations: encoding, by which the source material is converted into a compressed representation, and decoding, by which that representation is reconstructed for use.
44. A video sequence consists of successive pictures, which are commonly partitioned into smaller units such as blocks or macroblocks. Compression is achieved by exploiting redundant information both within an individual picture and across different pictures. Spatial compression relies on similarities between neighbouring pixels in the same picture, whereas temporal compression makes use of similarities between pictures appearing at different points in the sequence.
45. Encoding commonly uses inter-picture prediction. One or more reference pictures serve to predict the content of the picture currently being encoded. Rather than transmitting the entire current picture, the encoder communicates the residual differences between corresponding blocks, together with the information needed by the decoder to reproduce that picture. The combination

of predictive techniques and entropy coding substantially decreases the volume of data required to represent the sequence.

46. At the receiving end, the compressed material is decoded so that the video sequence can be reconstructed. The decoder processes a bitstream, generally expressed in binary form, which carries both the encoded picture data and control or header information specifying how the decoding operation is to be performed.

47. The decoding processing of a video sequence requires a distinction between decoding order and output order. Decoding order identifies the sequence in which pictures are decoded, while output order identifies the sequence in which they are subsequently made available, for example for display.

48. Pictures are decoded in an order determined by their dependencies on pictures decoded earlier, so as to permit correct reconstruction of the video. That order may differ from the order in which the pictures are ultimately output or displayed to the viewer.

49. Once decoded, pictures may be retained in a decoded picture buffer ("DPB"). Some are kept because they may serve as reference pictures for decoding later pictures. In that context, a reference picture supplies pixel information used to predict the pixel values of the picture presently being decoded, a technique known as inter-prediction.

50. The DPB may also retain decoded pictures that have not yet been output. Output denotes the transfer of a picture from the decoder for purposes such as display, storage or further processing. A picture may have to remain in the buffer where another picture, not yet decoded, must precede it in output order.

51. The decoder accordingly applies marking and output processes to the pictures held in the DPB. A picture is designated either "used for reference" or "unused for reference", depending on whether pictures later in decoding order may rely on it. This relationship is determined by decoding order and does not necessarily correspond to output order. Independently, a decoded picture is marked as either "needed for output" or "not needed for output". The picture-output process may release a picture marked as "needed for output" and then change its status to "not needed for output". That process generally follows the reference-picture marking process.

52. The Patent is concerned with a specific aspect of video decoding, namely the management of decoded pictures stored in the Decoded Picture Buffer ("DPB"), with the "*particular objective to provide such a decoding and encoding that enables low output delay for pictures*" (see para. [0033]).

53. As explained above, pictures are decoded according to a predefined decoding order, which does not necessarily correspond to the order in which they are ultimately presented. A picture may therefore be decoded and retained in the DPB while still being designated as "needed for output", even though other pictures decoded at a later stage must be output beforehand.

54. The patent proceeds from the observation that the decoder must determine the appropriate point in time at which a picture marked as "needed for output" can safely be removed from the DPB and output without jeopardising the correct presentation sequence. To that end, the patent relies on a parameter defining, for a given temporal layer, the maximum number of pictures that may appear before a picture in decoding order and after that same picture in output order. The patent

specifies that, where the number of pictures stored in the DPB and marked as “needed for output” exceeds that maximum value for the highest temporal layer being decoded, the earliest picture in output order is output from the buffer.

55. Figure 6 illustrates an example of a multilayer video sequence and depicts, for each picture, both the decoding order and the output order, together with the corresponding temporal layer.

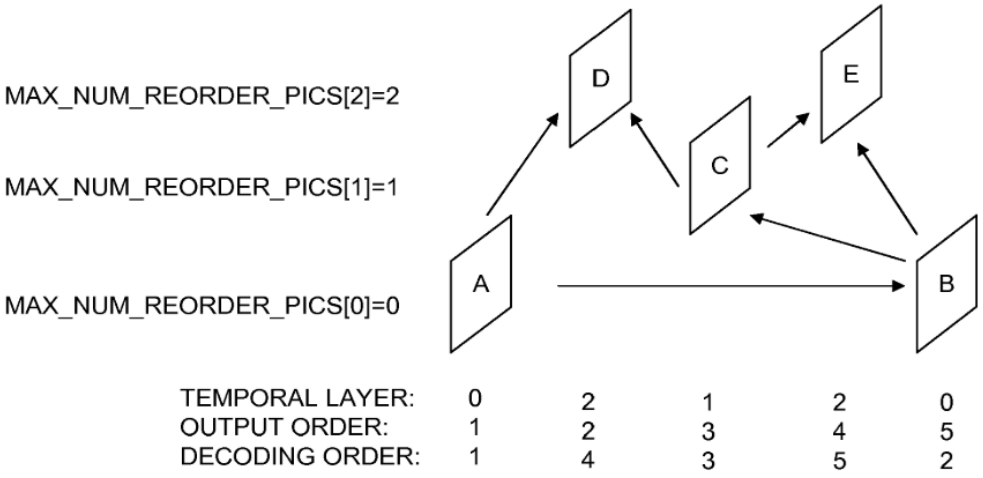


Fig. 6

56. In a multilayer coding structure, pictures are assigned to different temporal layers according to their temporal characteristics. Each picture is associated with a temporal identifier indicating the layer to which it belongs. The temporal layers are organised hierarchically, so that pictures belonging to lower layers do not depend on pictures of higher layers. As a consequence, higher temporal layers may be removed without affecting the decodability of pictures in lower layers, thereby enabling temporal scalability.

57. In the example shown in Figure 6, pictures A and B belong to temporal layer 0, picture C belongs to temporal layer 1, and pictures D and E belong to temporal layer 2. The figure further indicates that the decoding order is A-B-C-D-E, whereas the output order is A-D-C-E-B.

58. The arrows connecting the pictures illustrate their reference relationships. Thus, a picture may serve as a reference for one or more subsequently decoded pictures. Some pictures, such as D and E in the example, make use of more than one reference picture.

59. Figure 6 also provides the value of the parameter max_num_reorder_pics for the various temporal layers. This parameter represents the maximum number of pictures belonging to the same or a lower temporal layer that may precede a given picture in decoding order and follow it in output order. In other words, it reflects the extent of picture reordering that may occur between decoding and presentation.

60. The patent notes that keeping this parameter as low as possible is generally desirable, since a lower reordering capability reduces buffering requirements and output delay. At the same time, however, the parameter cannot be reduced below a certain threshold without risking the presentation of pictures in an incorrect order.

61. Against that background, the patent proposes a criterion for determining when a decoded picture that is still marked as “needed for output” should actually be output. According to claim 1,

the first picture in output order among the pictures currently stored in the DPB and marked as "needed for output" is output once the number of such pictures exceeds the value of max_num_reorder_pics applicable to the highest temporal layer being decoded.

62. The operation of the proposed mechanism may be illustrated by reference to Figure 30:

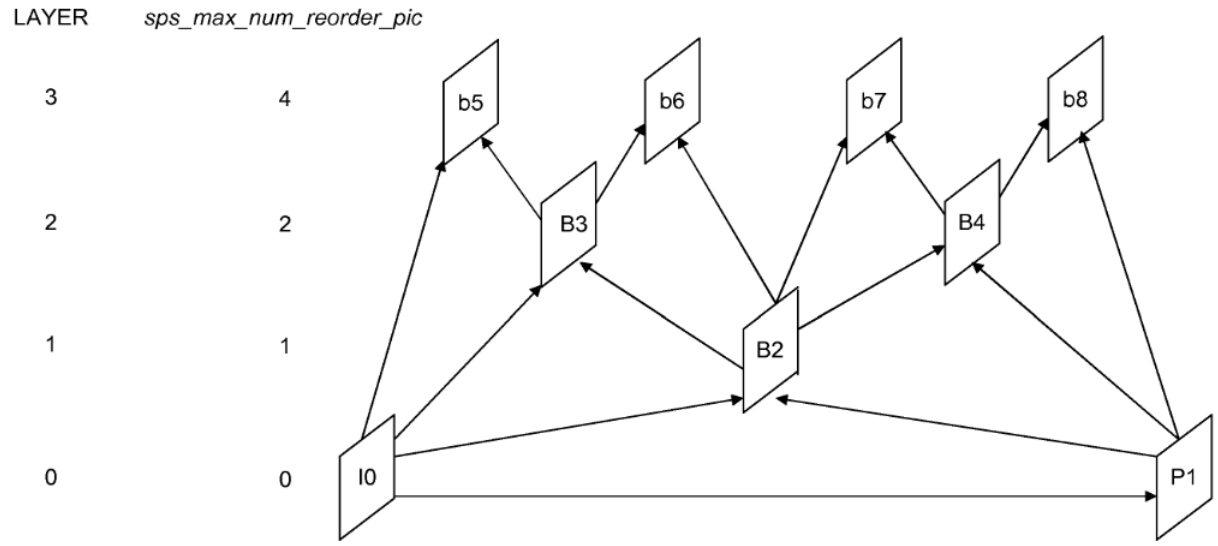


Fig. 30

63. Figure 30 depicts a further example of a multilayer video sequence. The numerical labels associated with the pictures indicate their decoding order, whereas the pictures are intended to be output from left to right, namely: I0, b5, B3, b6, B2, b7, B4, b8 and P1. The figure also identifies the relevant temporal layers and the corresponding values of the parameter sps_max_num_reorder_pics.

64. The prefix "sps_" indicates that the parameter is signalled in the Sequence Parameter Set ("SPS"), namely the data structure containing configuration information applicable to the video sequence as a whole.

65. According to the patent, assuming that temporal layer 3 is decoded, pictures are initially decoded and stored in the DPB while being marked as "needed for output". No picture is output as long as the number of pictures carrying that designation does not exceed the applicable value of sps_max_num_reorder_pics, which in the illustrated example is equal to four.

Picture	Not output yet	*sps_max_num_reorder_pics*	Action
I0	I0	4	No action
B1	I0 B2	4	No action
B2	I0 B1 B2	4	No action
B3	I0 B1 B2 B3	4	No action
B4	I0 B1 B2 B3 B4	4	Output I0
B5	B1 B2 B3 B4 b5	4	Output b5

66. Once decoding of picture B4 has been completed, the DPB contains five pictures marked as "needed for output". Since that number exceeds the permitted maximum, the earliest picture in output order, namely I0, is output and its status is updated accordingly.
67. The same principle continues to apply as additional pictures are decoded. When picture B5 has been decoded and stored, the number of pictures marked as "needed for output" again exceeds the threshold, so that B5 (b5), being the next picture in output order, is output.
68. The patent explains that the selected value of sps_max_num_reorder_pics ensures that no subsequently decoded picture can still precede B5 in output order. A lower value would result in pictures being output prematurely and could therefore lead to a presentation sequence inconsistent with the intended output order.
69. The patent thus discloses a mechanism whereby the output of decoded pictures is triggered once the number of pictures retained in the DPB and marked as "needed for output" exceeds a prescribed reordering limit for the highest decoded temporal layer. According to the patent, this mechanism ensures compliance with the required output order while limiting the amount of buffering needed within the decoder.
70. EP'673 is based on two principal aspects. First, it proposes that an additional bumping operation be performed after completion of the decoding of the current picture and before the slice header of the subsequent picture is parsed. Second, it provides that, for the purposes of the bumping process, the capacity of the DPB for pictures awaiting output is determined by the value sps_max_num_reorder_pics[HighestTid], rather than by sps_max_num_reorder_pics[TemporalId] as contemplated in the relevant HEVC draft specification.

71. The patent contains nine claims, including two independent method claims (claims 1 and 5) and four independent apparatus claims (claims 3, 6, and subordinate claims 8 and 9). The patent describes 13 embodiments, see. e.g. para. [0098] - [0134].
72. In particular, claim 1 is directed to a method of operating a decoder in a multilayer video coding environment. Under the claimed method, pictures may be bumped from the Decoded Picture Buffer ("DPB") following the decoding of a picture. The bumping operation is triggered when the number of pictures stored in the DPB exceeds a threshold corresponding to the maximum number of pictures specified by the bitstream as capable of preceding a picture in decoding order and following that picture in output order for the highest temporal layer being decoded. The claimed mechanism is applicable only to pictures belonging to a temporal layer lower than the highest temporal layer decoded by the decoder within a multilayer sequence comprising multiple picture layers.

73. Claim 1 of the patent is reproduced below. The feature breakdown adopted is that agreed between the parties:
    1.1 A method performed by a decoder (100,200,400), said method comprises:
    1.2 determining (S1), after a current picture of a bitstream has been decoded and stored in a decoded picture buffer (125, 225) a number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output,

1.3 said current picture belonging to a layer other than a highest layer that is decoded by said decoder (100, 200, 400) of a multi-layer video sequence comprising multiple layers of pictures;

1.4 deriving a value *sps_max_num_reorder_pics [HighestTid]* from a syntax element associated with said highest layer, wherein the *HighestTid* specifies said highest layer, and the syntax element is retrieved from a sequence parameter set in the bitstream, and each layer i of said multiple layers has an associated syntax element defining a respective value *sps_max_num_reorder_pics[i]*, and said value *sps_max_num_reorder_pics[i]* indicates a maximum allowed number of pictures that can precede any picture in said multi-layer video sequence in decoding order and follow that picture in output order when *HighestTid* is equal to i;

1.5 outputting (S3) a picture, which is a first picture in output order of said pictures in said decoded picture buffer (125, 225) that are marked as needed for output, if said number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output is greater than said value sps_max_num_reorder_pics[HighestTid]; and

1.6 marking (S4) said picture as not needed for output if said number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output is greater than said value sps_max_num_reorder_pics[HighestTid].

74. Claim 2 is dependent on claim 1 and adds the existing bumping step from the HEVC Draft which was carried out after parsing the slice header of the next picture.

75. Claim 3 is directed to a decoder apparatus and corresponds in substance to claim 1, the technical teaching being implemented in the form of a device claim.

76. Claim 4 depends on claim 3 and specifies that the decoder operates in accordance with the HEVC standard.

77. Claim 5 is directed to a method carried out by an encoder. Its subject-matter largely mirrors that of claim 1, save that it does not include a step of outputting a picture.

78. Claim 6 is directed to an encoder apparatus and corresponds, in all material respects, to claim 3, likewise without including any outputting functionality.

79. Claim 7 depends on claim 6 and further specifies implementation in accordance with the HEVC standard.

80. Claim 8 is directed to a mobile terminal comprising either a decoder according to claims 3 or 4, or an encoder according to claims 6 or 7.

81. Claim 9 is directed to a network node comprising either a decoder according to claims 3 or 4, or an encoder according to claims 6 or 7.

82. Figure 8 shows the key steps as claimed in claim 1 and in claim 3

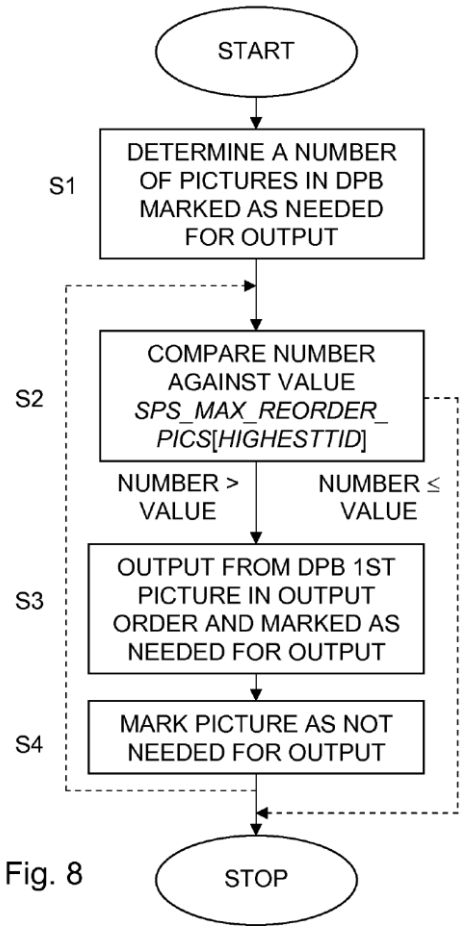


Fig. 8

83. S1 - Determine a number of pictures in the DPB that are marked as “needed for output”. The Patent specifies that this takes place after decoding a current picture.
84. S2 - Compare this number against a value sps_max_num_reorder_pics[HighestTid]. This value is control/header information which is provided by the encoder in the bitstream – the Patent claims this is ‘derived from a sequence parameter set in the bitstream’. At para. [0044], it is stated HighestTid indicates the highest temporal sub-layer in a particular video sequence that is decoded by the decoder. At para. [0045], it is explained, by using a general formula sps_max_num_reorder_pics[i], that this value “indicates the maximum allowed number of pictures that can precede any picture in the coded video sequence in decoding order and follow that picture in output order when HighestTid is equal to i”.
85. S3 - If the number of pictures in the DPB marked as “needed for output” is greater than the value sps_max_num_reorder_pics[HighestTid] then the first picture in output order is output from the DPB. Otherwise, no action is taken. The first picture in output order can be defined as the picture with the lowest picture order count value (PicOrdCntVal), but is not limited to this in the claim.
86. S4 - If output, the first picture in output order is then marked as “not needed for output”, given it has just been output.

87. Figure 9 shows the additional optional steps of claim 2. These steps take place before the picture has been decoded, but after the slice header of the current picture has been parsed.

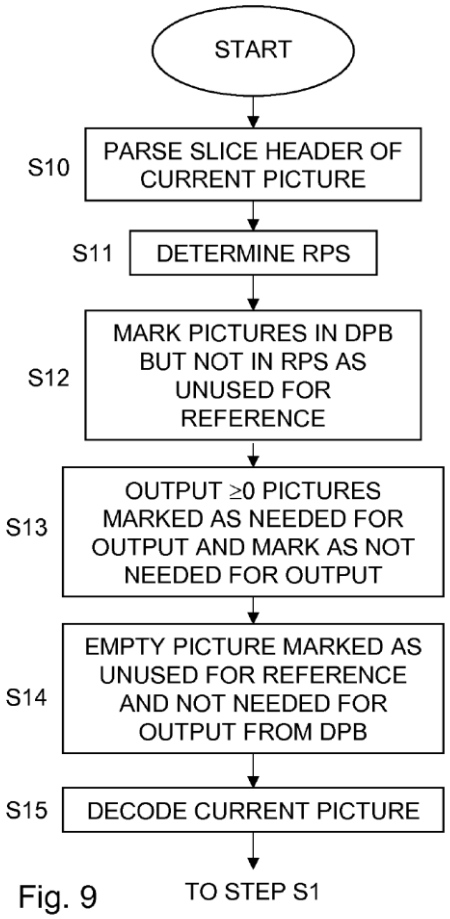


Fig. 9

4. Claim construction

88. In the present case, there is no genuine dispute between the parties as to the construction of claim 1. The claim language is drafted in a sufficiently specific and detailed manner such that the skilled person would not encounter any real difficulty in understanding the meaning of the terms employed.

89. The patent addresses the technical problem of reducing output delay in the encoding and decoding of pictures within a video sequence (see para. [0033], [0034]).

90. The solution proposed by claim 1 is based on outputting a picture from the DPB by reference to the value sps_max_num_reorder_pics[HighestTid]. That parameter defines the maximum number of pictures that may precede a picture in decoding order and following the same picture in output order for the highest temporal layer decoded by the decoder. As the patent makes clear, HighestTid refers to the highest temporal layer actually decoded by the decoder and does not necessarily correspond to the highest temporal layer signalled in the bitstream.

91. The value sps_max_num_reorder_pics[HighestTid] therefore provides the decoder with information as to the maximum number of pictures that may still need to be retained for correct output. Where the number of pictures currently marked as "needed for output" exceeds that value, the first picture in output order stored in the DPB is output and its status is updated accordingly.
92. According to the patent, this mechanism makes it possible to output a picture at an earlier stage where it is no longer required for reordering purposes, namely by changing the marking of a respective picture from "needed for output" to "not needed for output", thereby effecting an earlier output than without said mechanism. The resulting reduction of time for which the respective picture must be retained in the DPB contributes to a reduction of output delay.

93. The parties disagree essentially only as regards the interpretation of feature 1.3, in particular the requirement that the "*current picture*" belongs to "*a layer other than the highest layer that is decoded by said decoder*".
94. The Claimant submits that this wording merely constitutes a limitation of the claimed subject-matter. The Defendants, by contrast, contend that it amounts to an undisclosed disclaimer.
95. The Court will address that issue in greater detail in the section of this decision dealing with the Defendants' added-matter objection.

5. Counterclaim for revocation

5.1. General remarks

96. The Defendants challenge the validity of the patent on several grounds, namely: (i) added matter, (ii) lack of novelty, and (iii) lack of inventive step.

5.1.1. Prior art documents

97. For the purposes of these proceedings, the following prior art documents are of relevance:
- US patent application US 2012/61706869 (Priority Document), dated 28 September 2012 (Exhibit ASU-673-E1);
- Ericsson contribution JCTVC-F493 (F493), *Absolute Signaling of Reference Pictures*, dated 1 July 2011 (Exhibit ASU-673-F2);
- HEVC Draft JCTVC-K0030_v3 (HEVC Draft), dated 12 September 2012 (Exhibit ASU-673-E4);
- HEVC Standard (04/2013) (Exhibit ASU-673-F1).

98. The parties dispute whether the HEVC Draft forms part of the state of the art and may therefore be relied upon for the assessment of the Patent's validity.
99. Ericsson submits that the HEVC Draft does not form part of the state of the art and therefore cannot be relied upon for the assessment of the validity of the Patent.
100. According to the Claimant, the Defendants have failed to establish that the HEVC Draft was publicly available before the priority date of the Patent.

101. Ericsson further contends that, under the case law of the Technical Boards of Appeal of the EPO, information is considered available to the public only where a member of the public could gain access to it and derive knowledge from it without being subject to an obligation of confidentiality.
102. On that basis, the Claimant submits that the HEVC Draft does not meet the requirements for public availability.
103. First, the HEVC Draft was not accessible to members of the public. Referring to the expert statement of Mr [redacted] (Annex E2), Ericsson submits that access to the platforms through which documents of the JCT-VC (Joint Collaborative Team on Video Coding) were exchanged was restricted to participants in that organisation. Consequently, members of the public had neither access to the HEVC Draft nor any opportunity to obtain knowledge of its contents.
104. Ericsson further submits that the participants in the JCT-VC cannot themselves be regarded as members of the public. In this regard, Ericsson relies on the case law of the Technical Boards of Appeal concerning situations in which recipients of information are linked by a special relationship to the provider of that information. According to Ericsson, the experts participating in the activities of ITU-T SG16 and ISO/IEC JTC 1/SC 29/WG 11 (MPEG), which jointly formed the JCT-VC, were engaged in a collaborative standard-development process and therefore stood in such a special relationship. Ericsson submits that this circumstance further confirms that the HEVC Draft was not publicly accessible.
105. Second, Ericsson contends that participants in the JCT-VC were subject to a duty of confidentiality, even if no express confidentiality undertaking existed. Relying on decisions of the Technical Boards of Appeal recognising implied obligations of confidence arising from development or contractual relationships, Ericsson argues that the collaborative framework within which the HEVC standard was developed gave rise to such an implied obligation.
106. In support of that position, Ericsson again refers to the expert statement of Mr [redacted] according to which there existed a clear presumption of confidentiality in connection with the standardisation activities conducted within the ITU-T.

107. The Defendants submit that the HEVC Draft formed part of the state of the art before the priority date and may therefore be relied upon in the assessment of the validity of the Patent.
108. In support of that position, the Defendants first point to paragraph [0024] of the Patent, which refers to document JCTVC-K0030_v3 as having been "*published on 12 September 2012*". According to the Defendants, the Patent itself therefore acknowledges that JCTVC-K0030_v3 was published prior to the priority date of 28 September 2012.
109. The Defendants further note that the same statement already appeared in the parent PCT application. They contend that, by characterising JCTVC-K0030_v3 as having been published, Ericsson, acting as applicant of both the parent application and the Patent, expressly recognised that the document was publicly available from 12 September 2012.
110. The Defendants also emphasise that the HEVC Draft was among the principal prior-art references considered during both the PCT and the European examination proceedings. According to the Defendants, Ericsson never previously disputed the status of the HEVC Draft as prior art.

In their view, Ericsson's current contention that the document was not publicly available before the priority date is inconsistent with the position it adopted during prosecution of the Patent.

111. The Defendants further challenge Ericsson's reliance on the witness statement of Mr [redacted] They submit that the passages relied upon by Ericsson concern particular categories of documents, such as meeting reports, and do not establish that document JCTVC-K0030_v3 was subject to any confidentiality restrictions.

112. More specifically, the Defendants deny that the HEVC Draft was subject to any express or implied obligation of confidentiality. They contend that neither the document itself nor the procedures governing the activities of the JCT-VC support the existence of any such obligation.

113. In that regard, the Defendants rely on the Terms of Reference of the JCT-VC (Exhibit WKS-T 4), which, in their submission, confirm that documents made available through the relevant document-management system were not treated as confidential.

114. The Defendants additionally invoke EPO Board of Appeal case law. They submit that, in decision T 2778/18, the Board of Appeal held that a JCT-VC contribution became publicly available upon its upload to the JCT-VC document-management server. According to the Defendants, it is undisputed that the HEVC Draft (Version 8) was uploaded to that server on 12 September 2012, that is, before the priority date.

115. The Defendants further argue that documents generated in the context of video-coding standardisation activities have repeatedly been treated as prior art in EPO proceedings and that the case law generally recognises draft standards as publicly available unless specific circumstances justify a finding of confidentiality.

116. On that basis, the Defendants conclude that the HEVC Draft was made available to the public before the priority date and therefore forms part of the state of the art within the meaning of Article 54(2) EPC. Accordingly, they submit that the document may be relied upon in support of their invalidity objections.

117. The Court considers that pursuant to Article 54(2) EPC, a document forms part of the state of the art if it was made available to the public before the relevant date.

118. The decisive criterion is whether the information was made available to at least one member of the public who was not bound by an express or implied obligation of confidentiality. Conversely, information to which access was restricted by such confidentiality obligations does not form part of the state of the art. This approach is consistent with the established case law of the EPO Boards of Appeal, according to which public availability exists where at least one member of the public could gain access to the information without being subject to an obligation of confidentiality (T 1081/01), whereas information disclosed under express or implied confidentiality restrictions does not belong to the state of the art (T 818/93; T 838/97). In the specific context of JCT-VC documents, reference may further be made to T 2778/18, in which the Board considered a contribution uploaded to the JCT-VC document management server to have been made available to the public.

119. In the case at hand, The Terms of Reference of the JCT-VC cited by the Defendants are rather clear on this point, as they state as follows:

> In order to facilitate cross-organisational communication, all input and output documents of the JCT will be public (including the drafts of the coding specification, reference software, and conformance test data). The

120. That conclusion is further supported by the fact that Ericsson itself expressly identified 12 September 2012 as the publication date of the HEVC Draft in paragraph [0024] of EP '673, reproduced below.

> **[0024]** JCTVC-K0030_v3, Proposed Editorial Improvement for High efficiency video coding (HEVC) Text Specification Draft 8, B. Bross et al., JCT-VC of ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11 11th Meeting, Shanghai, 10-19 October 2012 as published on 12 September 2012 discuses usage of *max_num_reorder_pics* in section 7.4.2.1 on page

121. The Court therefore concludes that the HEVC Draft was made available to the public when it was uploaded to the JCT-VC server on 12 September 2012. It consequently forms part of the state of the art within the meaning of Article 54(2) EPC.

5.1.2. Person skilled in the art

122. The parties further disagree as to the definition of the person skilled in the art.

123. The Claimant submits that it would be inappropriate to attribute to the skilled person specialised expertise in particular sub-fields, such as decoded picture buffer management. In its view, the person skilled in the art is a practitioner holding a university degree, or possessing equivalent practical experience, in a relevant technical discipline such as electrical engineering or computer science and working in the field of video coding and decoding. Such a person would have a general working knowledge of video coding technologies and of widely adopted standards, including AVC/H.264, but would not possess detailed or specialised knowledge of advanced techniques or emerging standards such as HEVC at the priority date.

124. The Defendants, by contrast, contend that the skilled person is a technical expert working in the field of video decoding with specific expertise in decoded picture buffer management. According to the Defendants, such a person would hold at least a university degree in electrical engineering, computer science or a related discipline, such as telecommunications, and would have several years of experience in digital video encoding and decoding technologies, including the decoding methods known at the relevant date. The Defendants further submit that the skilled person would have followed the development of the HEVC standard and would have been accustomed to reviewing standardisation documents.

125. The Court considers that the relevant skilled person is a practitioner holding a university degree in electrical engineering, with a focus on information technology, and having several years of professional experience in the field of video coding and the related standardisation activities.

126. The precise definition of the skilled person is, however, of limited significance for the purposes of the present decision. The Court's conclusions do not depend on an assessment of inventive

step and, as will be explained below, it is therefore unnecessary to undertake any detailed analysis of the common general knowledge or capabilities of the skilled person beyond the definition set out above.

5.2. Added matter

127. Pursuant to Article 65(2) UPCA, the Court may revoke a patent, in whole or in part, only on the grounds referred to in Article 138(1) EPC.

128. Article 138(1)(c) EPC provides that, subject to Article 139 EPC, a European patent may be revoked with effect for a Contracting State where "the subject-matter of the European patent extends beyond the content of the application as filed or, if the patent was granted on a divisional application or on a new application filed under Article 61, beyond the content of the earlier application as filed".

129. Article 76(1) EPC further provides that a European divisional application "may be filed only in respect of subject-matter which does not extend beyond the content of the earlier application as filed".

130. The Court of Appeal has defined the legal standard applicable to added-matter objections concerning divisional applications as follows: "*There is added matter if the claim as granted contains subject-matter that extends beyond the content of the application as filed. In order to ascertain whether there is added matter, the Court must thus first ascertain what the skilled person would derive directly and unambiguously using his common general knowledge and seen objectively and relative to the date of filing, from the whole of the application as filed, whereby implicitly disclosed subject-matter, i.e. matter that is a clear and unambiguous consequence of what is explicitly mentioned, shall also be considered as part of its content.*
Where, as here, the patent results from a divisional application, this requirement applies to each earlier application. The subject matter of the granted claim 1 thus may not extend beyond (1) the disclosure of the application as filed for the patent in suit and (2) the disclosure of the original PCT application that entered the regional phase and is the parent application for the divisional application" (UPC CoA no. 764/2024 - 774/2024, decision of 2 October 2025).

131. The Defendants submit that feature 1.3—"*said current picture belonging to a layer other than a highest layer that is decoded by said decoder*"—constitutes added subject-matter contrary to Article 76(1) EPC. The Parent Application teaches that the claimed method is applied to all pictures in all temporal layers. It contains no direct and unambiguous disclosure of applying the method only to pictures below the highest decoded layer, or of treating selected layers differently.

132. The limitation was introduced for the first time in Ericsson's letter of 11 September 2014 to the EPO acting as the International Preliminary Examination Authority (IPEA). On 2 September 2014, a written opinion (Exhibit ASU-673-F5) was published by IPEA. The EPO found that the use of sps_max_num_reorder_pics[HighestTid] rather than sps_max_num_reorder_pics[TemporalId] was not obvious. This written opinion also found that "*it is now clearly apparent from the Applicant's reasoning that the claimed subject-matter departs from the*

teachings of D1 [F493] *and D2* [HEVC Draft] *only if the temporal layer being currently decoded is not the highest temporal layer*" and that "*the claims lack an inventive step*", i.e. for the highest temporal layer, sps_max_num_reorder_pics[HighestTid] in Ericsson's amended independent claims was the same as sps_max_num_reorder_pics[TemporalId] used in the prior art. Ericsson explained that, in light of the introduction of the limitation, the alleged invention lay in the use of sps_max_num_reorder_pics[HighestTid] rather than sps_max_num_reorder_pics[TemporalId].

133. In its response, Ericsson indicated that support for this feature can be found, among others, on
(i) page 16, lines 6 - 10;
(ii) page 23, line 31 to page 24, line 2;
(iii) page 32, lines 4-14 and
(iv) Fig. 30
of the corresponding PCT application as filed.

134. Defendants argue that the passages cited do not disclose the claimed distinction. Rather, they describe the method as applying to all decoded layers. Nor is there any embodiment in which the method is applied only to selected layers while other decoded layers, including the highest layer, are excluded.

(i) page 16, line 6-10

> Hence, in a particular embodiment the video sequence is a multi-layer video sequence comprising multiple, i.e. at least two, layers of pictures. Each layer of the multiple layers then preferably has an associated syntax element defining a respective value. The value used in the comparison of step S2 is then the value obtained from the syntax element associated with, in this embodiment, the highest layer that is decoded by the decoder of the multiple layers.

135. According to the Defendants, this paragraph only describes an embodiment in which the video sequence may comprise multiple layers of pictures, it further explains that each layer has an associated syntax element defining a respective value, and, finally, the value used for the comparison step is that obtained from the syntax element associated with the highest decoded layer. The cited paragraph does, however, not disclose the decoding steps for a picture belonging to a layer other than the highest layer.

(ii) page 23, line 31 to page 24, line 2

> In a particular implementation aspect of this embodiment, the video sequence is a multi-layer video sequence comprising multiple layers of pictures. In such a case, each layer has a respective value, i.e. *sps_max_num_reorder_pics*[i] for layer number i. The value to use is then the value associated with

136. The Defendants argue that this paragraph deals with multi-layer video sequences comprising multiple layers of pictures and the value, namely sps_max_num_reorder_pics[i], with i being the index of the highest decoded layer, to be used in the comparison step. Again, this paragraph

> the highest decoded layer, i.e. the highest layer that is decoded by the decoder, such as the highest sub-layer if the layers are different temporal layers.

is silent about the decoding steps of pictures belonging to specific layers.
(iii) (iv) page 32, lines 4-14 and Fig. 30

> If using an embodiment as disclosed herein with bumping, i.e. outputting, after decoding of the current picture and using HighesTId=3 then the following result is achieved.
>
> | Picture | Not output yet | *sps_max_num_reorder_pics* | Action |
> |---|---|---|---|
> | I0 | I0 | 4 | No action |
> | B1 | I0 B2 | 4 | No action |
> | B2 | I0 B1 B2 | 4 | No action |
> | B3 | I0 B1 B2 B3 | 4 | No action |
> | B4 | I0 B1 B2 B3 B4 | 4 | Output I0 |
> | B5 | B1 B2 B3 B4 b5 | 4 | Output b5 |
>
> If one uses temporal scaling and only decodes layers 0-2 then HighesTid is 2 and the following result is achieved according to an embodiment:
>
> I0
>
> | Picture | Not output yet | *sps_max_num_reorder_pics* | Action |
> |---|---|---|---|
> | I0 | I0 | 2 | No action |
> | B1 | I0 B1 | 2 | No action |
> | B2 | I0 B1 B2 | 2 | Output I0 |
> | B3 | B1 B2 B3 | 2 | Output B3 |
> | B4 | B1 B2 B4 | 2 | Output B2 |
>
> Hence, embodiments as disclosed herein are able to output pictures in correct order in the example as illustrated in Fig. 30, whereas the prior art solution in JCTVC-K0030_v3 does not give the correct output order when invoking the pumping process after parsing of slice headers.

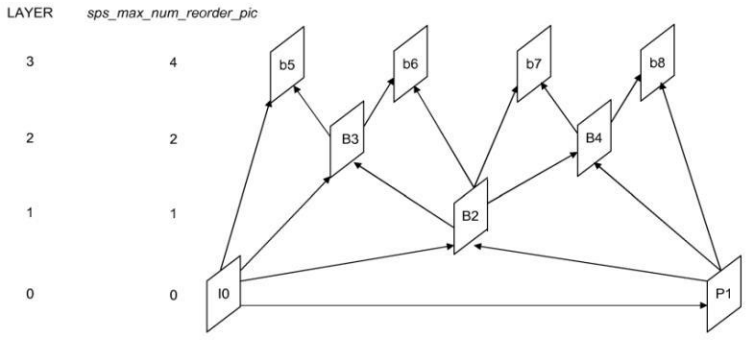


Fig. 30

137. In Defendants' view, none of these two alternatives embodiments teaches a treatment of the pictures of the highest layer different compared to the pictures not belonging to the highest layer. Contrary thereto and as pointed out above, the claims of the patent in suit, – even taking

account of the Claimant's interpretation – allows for an arbitrary treatment of the pictures following the decoding of pictures of the highest layer – for instance, all pictures of the highest layer could simply be decoded and stored in the DPB without causing output/bumping of (other) pictures.

138. The Defendants concluded that this is also the skilled person's technical understanding.

139. The decoded picture buffer stores pictures from all decoded layers, and the method operates correctly because the relevant maximum number of stored pictures is the same when pictures from lower layers and from the highest layer are processed. Applying the prescribed output rules only to lower-layer pictures, while leaving treatment of highest-layer pictures unrestricted, is neither disclosed nor technically consistent with the stated purpose of reducing output delay and maintaining the correct output order.

140. Contrary to the Claimant's case, Defendants see feature 1.3 not merely as a positive limitation. Under the Claimant's construction, the claim imposes no restriction on the treatment of highest-layer pictures: they may be processed in the same way as lower-layer pictures, by a different method, or even in a manner inconsistent with features 1.5 and 1.6. The relevant question is therefore whether the Parent Application directly and unambiguously discloses a decoder that performs features 1.2–1.6 for lower-layer pictures while permitting arbitrary processing of highest-layer pictures. According to Defendants it does not.

141. The Defendants further submit that feature 1.3 is an undisclosed disclaimer, introduced to overcome prior art cited under Article 54(2) EPC. According to the case law of the EPO Board of Appeal, none of the recognised exceptions for an undisclosed disclaimer applies: it does not delimit the claim against prior art under Article 54(3) EPC, exclude an accidental anticipation under Article 54(2) EPC, or remove subject-matter excluded from patentability for non-technical reasons under Articles 52–57 EPC (G1/03 of 8 April 2004). Even if the excluded subject-matter were regarded as disclosed, the amendment would still be impermissible because it singles out lower-layer pictures without any specific or implicit basis in the Parent Application.

142. The Defendants contend that the amendment also amounts to an unallowable intermediate generalisation.

143. The relied-upon embodiments disclose the same method steps for all pictures and link those steps, including the specified decoding order, to the technical effects of reducing output delay and ensuring correct output order. Isolating the lower-layer condition from that context creates subject-matter not originally disclosed. If highest-layer pictures need not follow the same output rules, pictures may remain in the decoded picture buffer until decoding of that layer is complete, thereby increasing delay and potentially disrupting the output order.

144. The same defect affects the remaining claims: claims 2 and 4 inherit it through dependency; claim 3 contains the same limitation; claims 5 and 6 contain materially equivalent wording; and claims 7–9 depend on claim 6. The prosecution history is not binding and cannot supply the missing disclosure. The Defendants therefore conclude that claims 1–9 contain added subject-matter and are invalid.

145. The Claimant submits that the feature "*said current picture belonging to a layer other than a highest layer*" is a positive limitation, not a disclaimer. The independent claims identify the

pictures for which patent protection is sought—namely, pictures in layers below the highest layer—but do not prohibit the disclosed method from also being performed on pictures in the highest layer. A true disclaimer would instead expressly exclude such pictures, for example by reciting "*excluding any picture in the highest layer that is decoded by said decoder*".

146. Accordingly, the amendment confines the claimed subject-matter to a defined subset of pictures without changing the operation of the method. The same method may still be applied to highest-layer pictures; those pictures simply fall outside the protection conferred by the Patent. The claim therefore covers pictures from the lowest layer up to, but not including, the highest layer.

147. The Claimant further submits that the amendment complies with Article 123(2) EPC. The Patent discloses that, for any picture in a layer between the lowest layer and the highest layer minus one, the method of independent claim 1 is performed. The amendment thus limits the claims to subject-matter directly and unambiguously derivable from the application as filed. The method steps—determining the number of pictures in the decoded picture buffer, deriving the value *sps_max_num_reorder_pics[HighestTid]*, outputting a picture and marking it as no longer needed for output—remain unchanged. They are performed irrespective of whether the current picture belongs to the highest layer or to a lower layer. The amendment neither changes the decoder's behaviour nor requires additional technical means and therefore makes no new technical contribution.

148. Ericsson maintains that the passages addressed in its response to the EPO of 11 September 2014 do disclose the claimed distinction.

(i) page 16, line 6-10

> Hence, in a particular embodiment the video sequence is a multi-layer video sequence comprising multiple, i.e. at least two, layers of pictures. Each layer of the multiple layers then preferably has an associated syntax element defining a respective value. The value used in the comparison of step S2 is then the value obtained from the syntax element associated with, in this embodiment, the highest layer that is decoded by the decoder of the multiple layers.

(ii) page 23, line 31 to page 24, line 2

> In a particular implementation aspect of this embodiment, the video sequence is a multi-layer video sequence comprising multiple layers of pictures. In such a case, each layer has a respective value, i.e. *sps_max_num_reorder_pics*[i] for layer number i. The value to use is then the value associated with the highest decoded layer, i.e. the highest layer that is decoded by the decoder, such as the highest sub-layer if the layers are different temporal layers.

149. According to Claimant, these paragraphs describe particular embodiments that comprise multiple layers of pictures. In both cases, the multi-layer video sequence comprises multiple, i.e. at least two, layers of pictures. This inherently implies that not all pictures belong to the highest layer, some belong to lower layers. The syntax element is layer specific. If the current picture

were in the highest decoded layer, the comparison could simply use the value sps_max_num_reorder_pics[i] where [i] is the layer identification of the current picture.

150. There would be no need to refer to the highest layer as a separate construct, since the current picture would itself define the highest layer being decoded. Therefore, the above provided sentence is interpreted, by a skilled person, as specifically directed to pictures not in the highest layer where the decoder must apply the reordering constraint of the highest layer it is decoding, rather than the layer of the current picture itself.

(iii) (iv) page 32, lines 4-14 and Fig. 30

If using an embodiment as disclosed herein with bumping, i.e. outputting, after decoding of the current picture and using HighesTId=3 then the following result is achieved.

Picture	Not output yet	*sps_max_num_reorder_pics*	Action
I0	I0	4	No action
B1	I0 B2	4	No action
B2	I0 B1 B2	4	No action
B3	I0 B1 B2 B3	4	No action
B4	I0 B1 B2 B3 B4	4	Output I0
B5	B1 B2 B3 B4 b5	4	Output b5

If one uses temporal scaling and only decodes layers 0-2 then HighesTid is 2 and the following result is achieved according to an embodiment:

Picture	Not output yet	*sps_max_num_reorder_pics*	Action
I0	I0	2	No action
B1	I0 B1	2	No action
B2	I0 B1 B2	2	Output I0
B3	B1 B2 B3	2	Output B3
B4	B1 B2 B4	2	Output B2

Hence, embodiments as disclosed herein are able to output pictures in correct order in the example as illustrated in Fig. 30, whereas the prior art solution in JCTVC-K0030_v3 does not give the correct output order when invoking the pumping process after parsing of slice headers.

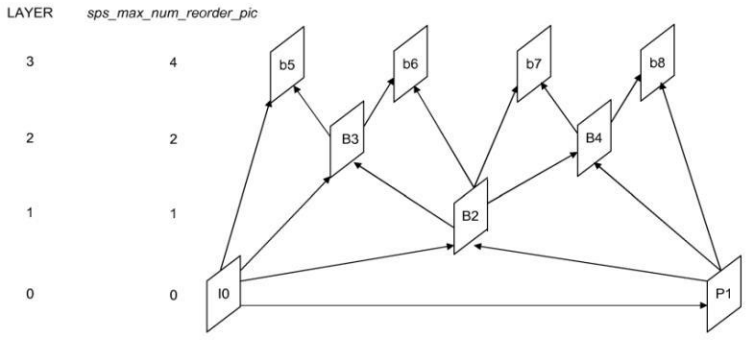


Fig. 30

151. The Claimant argues that the feature "*belonging to a layer other than a highest layer that is decoded by said decoder*" was introduced to limit the scope of the originally filed claim to a picture of a specific layer. The originally filed claim did not contain such a limitation, meaning

that the steps described therein were applicable to a picture in any layer, including the highest layer.

152. The Claimant further submits that, in the alternative, if the Court were to characterise the feature as a disclaimer, it would nevertheless be allowable under the principles established by the EPO Enlarged Board of Appeal in decision G 2/10 of 30 August 2011. That decision establishes that a disclaimer excluding disclosed subject-matter is permissible where the remaining subject-matter provides the skilled person with technical information directly and unambiguously derivable from the application as filed, taking account of common general knowledge. The strict criteria applicable to undisclosed disclaimers under G1/03 do not apply. Here, the remaining subject-matter satisfies the test in G2/10 because the application expressly discloses the performance of the method for pictures below the highest layer.

153. The Claimant disputes that the amendment constitutes an unallowable intermediate generalisation. It merely limits the originally filed claims to pictures outside the highest layer. In any event, the criterion reflected in the EPO Guidelines for Examination, Part H-V, section 3.2.1, is met: the extracted feature is neither related nor inextricably linked to other features of a particular embodiment, and the overall disclosure supports its isolation and introduction into the claim. The method is performed independently for each picture; its application to a picture in a lower layer neither affects nor depends on its application to a picture in the highest layer, and vice versa.

154. The Claimant therefore concludes that the amendment is a permissible limiting feature which clarifies the scope of protection without adding technical information, altering the disclosed functionality or extending beyond the content of the application as filed.

155. The Court considers that sub-feature 1.3 *belonging to a layer other than a highest layer that is decoded by said decoder* limits the scope of the claim irrespective of whether it is characterised as a disclaimer or as a "true limitation".

156. Characterising the sub-feature as a disclaimer might confer hypothetical advantages on the Claimant in view of the practice of the EPO Boards of Appeal, under which undisclosed disclaimers may be allowable in certain circumstances (G 1/03, cited above, and G 2/03 of 8 April 2004). No such advantages arise if the sub-feature is not characterised as a disclaimer. Since the Claimant nevertheless submits that the sub-feature is a true limiting feature rather than a disclaimer, the Court need not decide whether that EPO practice should be applied in the present case. The Court therefore interprets the sub-feature independently of its characterisation as a disclaimer under EPO practice and assesses whether, from the perspective of the skilled person, the claimed subject-matter is directly and unambiguously derivable from the application as originally filed.

157. The Parent Application of the Patent discloses, in general terms, a method to be applied after a current picture has been decoded; that picture may belong to any layer intended to be decoded. It follows from the claims and the description that the method is intended to be applied sequentially in the context of multiple picture layers (see, for example, the layer index [i]), with pictures generally being decoded from the lowest layer up to the highest layer intended to be decoded (see, for example, the first paragraph on page 4 of the Parent Application).

158. From the perspective of the skilled person, a current picture within the meaning of the disclosed method will therefore often not belong to the highest layer. The exception is where a picture from the highest layer is being decoded (see, for example, pages 15 to 17 of the Parent Application). The first paragraph on page 17 states that the method is preferably performed once for each picture. This indicates that the method need not necessarily be performed for every picture in every layer, contrary to the argument of the Claimant.

159. Furthermore, the general object of the invention is to reduce output delay, in particular by outputting pictures earlier (see, for example, page 13, lines 24 to 27 of the Parent Application). Earlier output of pictures implicitly also concerns lower layers, namely layers "belonging to a layer other than the highest layer". The feature "*belonging to a layer other than the highest layer*" is therefore consistent with an implicit aspect of the general teaching: allowing pictures to be output from the DPB before one or more final pictures from the highest layer have been decoded.

160. Nevertheless, from the perspective of the skilled person, the feature "*belonging to a layer other than the highest layer*" is not directly and unambiguously derivable from the application as filed. This is because the early output of pictures contemplated by the general teaching may be implemented in an unspecified number of ways. For example, the current picture may belong to a layer below the second-highest layer, which may likewise reduce output delay. Similarly, where more than one picture belongs to the highest layer (see, for example, Figure 30 of the Patent), it is not directly and unambiguously apparent to the skilled person that the method should generally be applied to pictures outside that layer. In other words, the general teaching in the Parent Application, namely that output delay may be reduced where the method is applied before the final picture of a sequence is decoded, is not sufficient to also disclose said feature.

161. Since the skilled person would understand from the general teaching that the current picture may belong to any layer, including a layer below the highest layer, it may nevertheless be determined whether the feature "*belonging to a layer other than the highest layer*" constitutes one of several alternatives directly and unambiguously derivable from the application and capable, on that basis, of validly limiting the claim.

162. The Court considers, having regard to the arguments of the parties, that the Parent Application as originally filed does not individualise any particular subgroup of pictures to which the general teaching may or should be applied. The general disclosure that the method may be applied to any picture, but need not be applied to every picture in the sequence, does also not amount, expressly or implicitly, to a set of individualised alternatives. Rather, it encompasses an unspecified number of equally possible alternatives depending on the number of layers and the number of pictures per layer.

163. In those circumstances, the skilled person cannot directly and unambiguously derive a limitation to a subgroup of layers, in particular to layers other than the highest layer.

164. Although the application as originally filed contains examples in which the method is applied after decoding pictures outside the highest layer, it does not disclose the class of all pictures "*belonging to a layer other than the highest layer*" as an individualised subgroup governing the

scope of the method. The presence of particular non-highest-layer pictures in disclosed embodiments is therefore insufficient to establish direct and unambiguous disclosure of the general limitation introduced into the claims.

165. The subject-matter of claim 1 therefore extends beyond the content of the earlier application as filed. The ground for revocation under Article 138(1)(c) EPC is accordingly established, having regard to the requirement laid down in Article 76(1) EPC for divisional applications.

166. For the same reasons, *mutatis mutandis*, the subject-matter of all remaining claims also extends beyond the content of the application as originally filed.

5.3. Lack of novelty

167. Although the Court's findings on added matter are sufficient to justify the revocation of the Patent, the Court nevertheless considers it appropriate to address the Defendants' objection based on lack of novelty. The Court finds that this independent ground for revocation is also well founded, for reasons which are closely related to those underlying its conclusion on added matter.

168. The Defendants request that the patent be declared invalid due to lack of novelty, in accordance with the provisions of Article 54 EPC, according to which "1. *An invention shall be considered to be new if it does not form part of the state of the art.* 2. *The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application.*"

169. The Defendants' novelty attack is based on the contention that the Patent is not entitled to claim priority from the Priority Document (US'869), filed on 28 September 2012.

170. Article 87(1) EPC provides that "Any person who has duly filed, in or for any State party to the Paris Convention for the Protection of Industrial Property or any Member of the World Trade Organization, an application for a patent, a utility model or a utility certificate, or his successor in title, shall enjoy, for the purpose of filing a European patent application in respect of the same invention, a right of priority during a period of twelve months from the date of filing of the first application".

171. In general, the expression "the same invention" in Article 87 EPC is to be interpreted as meaning that a claimed invention is to be regarded as the same invention as that disclosed in an earlier application only if the skilled person, using common general knowledge, can derive the subject-matter of the claim directly and unambiguously from the earlier application considered as a whole. This standard corresponds to the disclosure standard applied when assessing added matter under Article 123(2) EPC (UPC CFI no. 461/2024, LD Hamburg, decision of 5 November 2025; UPC CFI no. 115/2024, LD Düsseldorf decision of 15 October 2025).

172. The Court concurs with the approach taken in the existing UPC case law and considers that the same principles are applicable in the present case.

173. The Defendants submit that the parent application WO'066 differs from the priority document US'869 because the priority document does not disclose "said current picture belonging to a

layer other than the highest layer" (which, in the Defendants' submission, constitutes a disclaimer).

174. Defendants argue that the Priority Document merely discloses that the methodology is to be applied to pictures at all layers. It contains no indication that, when pictures from a range of layers are decoded, the lower-layer pictures should be treated differently from any other pictures to be decoded.

175. Accordingly, the excluded subject-matter—namely, the application of the method where the current picture belongs to the highest decoded layer—is not disclosed as a distinct alternative. Nor is the subject-matter remaining in the claim after introduction of the limitation, namely the application of the claimed method to the subgroup of current pictures belonging to layers other than the highest layer, directly and unambiguously disclosed, whether explicitly or implicitly, to the skilled person applying common general knowledge.

176. Moreover, the passages of WO'066 on which Ericsson relied in its letter of 11 September 2014 to the ISA as support for introducing the Disclaimer are entirely absent from the Priority Document.

177. Since the priority claim is invalid, the effective date of the subject matter of the claim at issue is the filing date of the parent application, i.e. 26 September 2013.

178. The April 2013 version of the HEVC standard was approved and made available on the ITU-T website on 13 April 2013. It was formally published on 7 June 2013.

179. The Patent contains two teachings, both expressly disclosed in the April 2013 HEVC standard: (i) section C.5.2.2 uses sps_max_num_reorder_pics[HighestTid], rather than sps_max_num_reorder_pics[TemporalId]; and (ii) section C.5.2.3 provides for an additional bumping step after the current picture has been decoded.

180. It follows that, if the Patent is not entitled to the claimed priority and is essential to the September 2023 HEVC standard, as Ericsson alleges, the claimed subject matter lacks novelty over the April 2013 HEVC standard.

181. As the granted claims do not prescribe which method steps are to be performed once the pictures of the highest layer have been decoded, the decisive issue is whether the Priority Document discloses a method requiring the claimed steps to be applied to every picture belonging to a layer other than the highest layer, while leaving open the steps to be applied to pictures belonging to the highest layer.

182. The parameters sps_max_num_reorder_pics[HighestTid] and HighestTid, which are expressly required by and recited in the claims, appear only twice in the Priority Document: first, on page 12, in the proposed amended section C.5.3 of HEVC draft JCTVC-K0030_v3; and second, on page 13, in the proposed amended section C.3.2 of that draft. Only the first embodiment provides for an additional picture-output process after decoding.

C.5.3 Picture decoding, marking and storage and possible output of one picture

The following happens instantaneously when the last decoding unit of access unit n containing the current picture is removed from the CPB.

The current picture is considered as decoded after the last decoding unit of the picture is decoded. The current decoded picture is stored in an empty picture storage buffer in the DPB, and the following applies.

3. – If the current decoded picture has PicOutputFlag equal to 1, it is marked as "needed for output".
4. – Otherwise (the current decoded picture has PicOutputFlag equal to 0), it is marked as "not needed for output".

If the current decoded picture is a reference picture, it is marked as "used for reference", otherwise (the current decoded picture is a non-reference picture), it is marked as "unused for reference".

When the number of pictures in the DPB that are marked as "needed for output" is greater than sps_max_num_reorder_pics[HighestTid] after the current decoded picture has been stored in the DPB, the picture in the DPB with the smallest value of PicOrderCntVal of all pictures in the DPB is cropped, output and marked as "not needed for output".

183. The description of this sole embodiment referring to HighestTid and sps_max_num_reorder_pics[HighestTid] draws no distinction between the treatment of pictures belonging to layers other than the highest layer and that of pictures belonging to the highest layer. The instructions apply to all pictures alike.

184. The Claimant submits that the Priority Document discloses the feature “said picture belonging to a layer other than the highest layer”.

185. Ericsson relies, first, on Embodiment 1, beginning on page 9 of the Priority Document. According to the Claimant, that embodiment describes, in steps 1 to 6, the decoding of a particular picture “P” belonging to a layer of the multilayer video sequence other than the highest layer. Once picture “P” has been decoded, a subsequent picture “Q” is decoded, as set out in step 7.

186. Ericsson further relies on Embodiments 5, 6, 7 and 9 on page 11 of the Priority Document, which, in its submission, confirm that the bitstream contains multiple layers. Since each of those embodiments refers back to Embodiment 1, the Claimant considers them to disclose further aspects of that embodiment. They state that the value to be used may be the maximum value for all layers or the value derived for the highest layer. In Embodiment 7, the highest layer is expressly defined as the highest sub-layer, namely HighestTid.

187. In the Claimant’s submission, this interpretation applies to pictures “P” and “Q” as defined in Embodiment 1, since those pictures may belong to any layer of the multilayer video sequence. Put differently, Ericsson contends that the relevant principle applies to pictures in every layer of that sequence.

188. The Claimant submits that the skilled person, reading those embodiments, would understand that the value derived for the highest layer may be used for that layer and must also be used for all lower layers. According to Ericsson, this follows particularly clearly from Embodiment 5, since otherwise the distinction drawn there between a “layer” and the “highest layer” would serve no purpose. On that basis, the value derived for the highest layer is also applicable to a picture belonging to a layer other than the highest layer.

189. Ericsson maintains that this construction is further supported by page 5 of the Priority Document, which states that “max_num_reorder_pics[i] is the same as num_reorder_frames but each

codeword here indicates the maximum allowed number of pictures in the same or lower temporal layers that precedes a picture in decoding order and succeeding that picture in output order".

190. According to the Claimant, the skilled person would immediately understand from this passage that the parameter max_num_reorder_pics[i] also applies to pictures in lower temporal layers, i.e. to pictures in any layer below the highest layer. Ericsson submits that this corresponds to the feature introduced into the independent claims, namely a picture belonging to a layer other than the highest layer.
191. On that basis, the Claimant concludes that the feature "said picture belonging to a layer other than the highest layer" is disclosed in the Priority Document. More specifically, Ericsson submits that the priority claim is valid because the claimed subject matter—and, in particular, the introduced feature—is directly and unambiguously derivable from the disclosure of the invention in the Priority Document, taking account also of those features which are implicit to the skilled person in what is expressly stated therein (Guidelines C V, 2.4).
192. Accordingly, it is the Claimant's case that the Patent is entitled to the claimed Priority Date.

193. In applying the legal standard set out above, the Court reiterates its findings in relation to added matter.
194. As indicated by Claimant, claim 1 of the Patent may generally correspond to the combination of embodiments 1, 2, 3 (SPS alternative), 5, 7, and 9 of the Priority Document. The limitation that the picture belongs to "a layer other than the highest layer", however, is not directly and unambiguously derivable from the Priority Document.
195. While the Priority Document discloses applying the claimed method to a picture which may belong to any layer, it does not directly and unambiguously disclose the selection of the specific subgroup of pictures belonging to layers other than the highest layer. That limitation is not sufficiently individualised in the Priority Document.
196. The Court therefore concludes that the subject-matter of claim 1 is not directly and unambiguously disclosed in the Priority Document. Consequently, claim 1 is not entitled to the claimed priority date. For the same reasons, and mutatis mutandis, the claimed priority is likewise invalid for the remaining asserted claims.
197. In the absence of a valid priority claim, the effective date of the subject-matter of the Patent is the filing date of the parent application, namely 26 September 2013.
198. By that date, the April 2013 version of the HEVC standard had already been finalised, approved and made publicly available. In particular, the HEVC standard was approved and made available through the ITU-T website on 13 April 2013 and was subsequently formally published on 7 June 2013.
199. The Claimant does not dispute that the technical teaching of the Patent is expressly disclosed in the April 2013 HEVC standard. This applies, in particular, to the use of sps_max_num_reorder_pics[HighestTid] instead of sps_max_num_reorder_pics[TemporalId] and to the additional bumping step performed after decoding of the current picture.
200. It follows that, once the claimed priority date is denied, the April 2013 HEVC standard forms part of the state of the art. For independent claims 1, 3, 5, 6, 8, and 9. the Court's finding of

lack of novelty rests on its conclusion that the April 2013 HEVC standard directly and unambiguously discloses every feature of those claims.

5.4. Conclusion on invalidity.

201. In light of the foregoing, the Court grants the Defendants' request and revokes the patent at issue, EP'673, in its entirety on the grounds of added matter and lack of novelty.

202. Having found that the Patent is invalid for added matter and, independently, for lack of novelty, the Court considers it unnecessary to address the Defendants' further attack based on lack of inventive step.

6. Auxiliary request

203. Ericsson has filed one conditional auxiliary request pursuant to R. 30.1 RoP. For ease of reference, the relevant text is reproduced below[1].

1. A method performed by a decoder (100,200,400), said method being performed on pictures in multiple layers of a multi-layer video sequence comprising multiple layers of pictures, said method comprises:

determining (S1), after a current picture of a bitstream has been decoded and stored in a decoded picture buffer (125,225) a number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output, ~~said current picture belonging to a layer other than a highest layer that is decoded by said decoder (100, 200, 400) of a multi-layer video sequence comprising multiple layers of pictures~~;

deriving a value *sps_max_num_reorder_pics[HighestTid]* from a syntax element associated with ~~said~~ a highest layer of said multi-layer video sequence comprising multiple layers of pictures, wherein the *HighestTid* specifies said highest layer, and the syntax element is retrieved from a sequence parameter set in the bitstream, and each layer *i* of said multiple layers has an associated syntax element defining a respective value *sps_max_num_reorder_pics[i]*, and said value *sps_max_num_reorder_pics[i]* indicates a maximum allowed number of pictures that can precede any picture in said multi-layer video sequence in decoding order and follow that picture in output order when *HighestTid* is equal to *i*;

outputting (S3) a picture, which is a first picture in output order of said pictures in said decoded picture buffer (125,225) that are marked as needed for output, if said number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output is greater than said value *sps_max_num_reorder_pics[HighestTid]*; and

marking (S4) said picture as not needed for output if said number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output is greater than said value *sps_max_num_reorder_pics[HighestTid]*.

3. A decoder (100,200) configured to, for pictures in multiple layers of a multi-layer video sequence comprising multiple layers of pictures:

determine, after a current picture of a bitstream (10) representing pictures of a said multi-layer video sequence comprising multiple layers of pictures has been decoded and stored in a decoded picture buffer (125, 225), a number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output, ~~said current picture belonging to a layer other than a highest layer that is decoded by said decoder (100,200) of said multi-layer video sequence~~;

derive a value *sps_max_num_reorder_pics [HighestTid]* from a syntax element associated with ~~said~~ a highest layer of said multi-layer video sequence comprising multiple layers of pictures, wherein the *HighestTid* specifies said highest layer, and the syntax element is retrieved from a sequence parameter set in the bitstream, and each layer *i* of said multiple layers has an associated syntax element defining a respective value *sps_max_num_reorder_pics [i]*, and said value *sps_max_num_reorder_pics [i]* indicates a maximum allowed number of pictures that can precede any picture in said multi-layer video sequence in decoding order and follow that picture in output order when *HighestTid* is equal to *i*;

output a picture, which is a first picture in output order, of said pictures in said decoded picture buffer (125, 225) that are marked as needed for output if said number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output is greater than said value *sps_max_num_reorder_pics [HighestTid]*; and

mark said picture as not needed for output if said number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output is greater than said value *sps_max_num_reorder_pics [HighestTid]*.

204. Ericsson submits that Auxiliary Request 1 complies with all requirements of R. 30.1 RoP.

205. As regards the amendments to claims 1 and 3, Ericsson argues that these claims now specify that the claimed method is performed for pictures (plural) in layers (plural) of a multi-layer

[1] Feature breakdown of amended claim 1 as provided by the Defendants and not disputed by the Claimant:

1.1Aux1 A method performed by a decoder (100,200,400), said method being performed on pictures in multiple layers of a multi-layer video sequence comprising multiple layers of pictures, said method comprises:

1.2 determining (S1), after a current picture of a bitstream has been de-coded and stored in a decoded picture buffer (125, 225) a number of pictures in said decoded picture buffer (125, 225) that are marked as needed for output,

1.3 said current picture belonging to a layer other than a highest layer that is decoded by said decoder (100, 200, 400) of a multi-layer video sequence comprising multiple layers of pictures;

1.4Aux1 deriving a value *sps_max_num_reorder_pics* [*HighestTid*] from a syntax element associated with said a highest layer of said multi-layer video sequence comprising multiple layers of pictures, wherein […]

1.5 outputting (S3) a picture, […]

1.6 marking (S4) said picture as not needed for output […].

video sequence. The amended claims therefore require the method to be carried out for multiple pictures in multiple layers.

206. According to the Claimant, a basis for these amendments can be found in the application as filed, in particular at page 18, lines 5-9; page 20, line 30 to page 21, line 9; page 24, line 31 to page 25, line 2; page 25, lines 18-21; page 27, lines 11-29; page 28, lines 11-13 and 19-20; Figure 30 and the corresponding description at page 32, line 20 to page 33, line 14.

207. Ericsson further contends that, as a consequence of these amendments, the Defendants' arguments concerning the alleged invalidity of the priority claim and the so-called disclaimer are no longer relevant. As to novelty and inventive step, the Claimant submits that the arguments advanced in support of the patent as granted apply equally to Auxiliary Request 1.

208. More specifically, Ericsson argues that the amended claims are directed to pictures in the layers of a multi-layer video sequence comprising multiple layers of pictures. In its view, the reference to "*layers*" necessarily encompasses layers other than the highest layer. Consequently, the scope of the amended independent claims is not limited exclusively to pictures in the highest layer. Ericsson therefore maintains that the independent claims of Auxiliary Request 1 represent a limitation of the granted claims and that all validity arguments previously advanced remain applicable.

209. The Claimant emphasises that the amended independent claims require that the method be applicable to pictures from multiple layers of the video sequence.

210. With regard to clarity under Article 84 EPC, Ericsson submits that the skilled person would have no difficulty understanding the relationship between the expressions "pictures in multiple layers" and "current picture". According to the Claimant, in the field of video decoding it is common for decoding operations, including the steps recited in claim 1, to be carried out within a decoding process applied to multiple layers of a video sequence.

211. Ericsson further argues that the term "current picture" constitutes standard terminology in the relevant technical field and denotes the picture presently being decoded. The skilled person would therefore immediately understand that the claimed method requires the decoding process to be performed for pictures located in multiple layers.

212. According to the Claimant's submission, the wording of the claim makes clear that the recited steps must be performed for pictures, namely multiple pictures, in multiple layers, such that those steps are repeated. The method is first carried out for a first picture, which at that point constitutes the current picture, and subsequently for a second picture, which then becomes the current picture. Ericsson contends that these pictures belong to different layers of the multi-layer video sequence, as required by amended claim 1.

213. As regards Article 123(2) EPC, Ericsson submits that the amendment does not introduce subject-matter extending beyond the content of the application as originally filed. The Claimant argues that a skilled person, reading the claims as originally filed together with the cited passages of the description, would directly and unambiguously derive that the disclosed method is applicable not only to a picture in a non-highest layer but also to pictures in multiple layers of a multi-layer video sequence.

214. Ericsson further contends that the amendments comply with Article 123(3) EPC, as they do not extend the protection conferred by the patent.

215. The Claimant points out that granted claim 1 was expressly directed to a method performed for a picture in a layer that is not the highest layer. By contrast, amended claim 1 specifies that the method is "performed on pictures in multiple layers of a multi-layer video sequence comprising multiple layers of pictures".
216. According to Ericsson, this amendment narrows the scope of protection because the method can no longer be applied to a single picture in a non-highest layer taken in isolation. Rather, the claim now requires the method to be carried out for at least two pictures in at least two different layers of the video sequence.
217. The Claimant therefore argues that the amended subject-matter necessarily involves the processing of at least one picture in a layer other than the highest layer, since the highest layer alone cannot satisfy the requirement of "multiple layers". In Ericsson's submission, claim 1 is consequently narrower than granted claim 1 because it requires application of the method across multiple pictures and multiple layers.
218. Ericsson submits that the same considerations apply, mutatis mutandis, to claim 3 and to the corresponding dependent claims.
219. Finally, Ericsson argues that the scope of amended independent claims 1 and 3, and in particular the newly introduced feature requiring the method to be performed for pictures in multiple layers, is likewise disclosed in the priority document.
220. In this regard, the Claimant relies on the detailed description at page 9 of the priority document, in particular Section 3.1.1, where the method is disclosed in relation to picture "P" and picture "Q". Ericsson further refers to embodiments 5 and 7 on page 11 of the priority document, which, according to the Claimant, show that the value to be used for each layer is derived from the highest layer in the bitstream. In the Claimant's view, the skilled person would understand from these embodiments that the value associated with the highest layer is intended to be used for pictures in different layers.
221. Reference is also made to Section C.5.3 on page 12 of the priority document, which discloses an additional bumping step in relation to a particular picture. Ericsson submits that the skilled person would readily understand that this teaching is intended to be applied to pictures in any layer of the multi-layer video sequence.
222. Accordingly, Ericsson maintains that the amendments introduced by Auxiliary Request 1 are fully supported by, and entitled to claim priority from, the priority application.

223. The Defendants submit that, in Auxiliary Request 1, the Claimant deleted feature 1.3 in its entirety, although that feature had been decisive for the grant of the Patent.
224. They argue that amended feature 1.1 merely states that the claimed method is performed by a decoder and is "performed on pictures in multiple layers". The method is then said to "comprise" the steps set out in features 1.2, 1.4^{Aux1}, 1.5 and 1.6. According to the Defendants, however, those steps all concern a single bumping operation relating to one "current picture". The amended wording therefore does not require those steps to be carried out for more than one picture or for pictures belonging to different layers. It leaves open how other pictures, including pictures in other layers, are treated.

225. On that basis, the Defendants contend that amended claim 1 also encompasses a method in which features 1.2, 1.4^{Aux1}, 1.5 and 1.6 are applied only to a picture in the highest decoded layer, while pictures in lower layers are treated differently.

226. The Defendants therefore submit that the application to amend does not satisfy the requirements of R. 30.1 RoP.

(a) Extension of the scope of protection — Article 123(3) EPC

227. The Defendants rely on the principle that a granted claim may not be amended by deleting limiting subject-matter where that deletion extends the protection conferred, contrary to Article 123(3) EPC. Where the deleted limitation had itself been introduced contrary to Article 123(2) EPC, the proprietor is caught in the "inescapable trap" (Case Law of the Boards of Appeal, 11th ed., July 2025, section II.E.2.4.1).

228. In their submission, deleting feature 1.3 from granted claim 1 extends the scope of protection conferred by the Patent.

229. They observe that feature 1.3 distinguished the claimed subject-matter from the prior art cited during the grant proceedings by requiring features 1.2, 1.4, 1.5 and 1.6 to be applied to a current picture belonging to a layer other than the highest layer.

230. By contrast, claim 1 of Auxiliary Request 1 encompasses, according to the Defendants, embodiments in which features 1.2, 1.4^{Aux1}, 1.5 and 1.6 are applied only to pictures in the highest layer, while pictures in lower layers may be treated differently. Such embodiments were not covered by granted claim 1, because feature 1.3 required those steps to be applied to a current picture belonging to a layer "other than a highest layer".

231. The Defendants submit that the amended claim contains no limitation requiring the relevant method steps actually to be applied to pictures from multiple layers or, in particular, to a picture belonging to a layer other than the highest layer.

(b) Lack of clarity — Article 84 EPC

232. The Defendants further submit that the relationship between the "*pictures in multiple layers*" referred to in feature 1.1^{Aux1} and the "*current picture*" referred to in features 1.2, 1.4^{Aux1}, 1.5 and 1.6 is unclear. In their view, claims 1 and 3 do not require those steps to be applied to pictures in multiple layers; it is sufficient that they are applied to a single *current picture*.

233. Even if the Claimant's construction were adopted, according to which the steps must be applied to pictures in at least two layers, the Defendants argue that the claims would still fail to specify how pictures in the remaining layers are to be treated.

234. They add that the Claimant's reliance on a "first picture" and a "second picture" is not reflected in the claim wording. The amended claims neither identify such pictures nor require every picture to be treated in accordance with the claimed steps, or any two specified pictures to belong to different layers.

235. According to the Defendants, the need to read such additional limitations into the claims confirms that Auxiliary Request 1 does not meet Article 84 EPC. On the wording adopted, the claims require only that the stated steps be performed in relation to a single current picture.

(c) Added matter — Articles 123(2) and 76(1) EPC

236. The Defendants submit that none of the passages relied upon by the Claimant discloses that pictures in one layer may be treated by features 1.2, 1.4^{Aux}1, 1.5 and 1.6 while other pictures or

layers may be treated differently. Yet, in their view, that broader arrangement falls within claims 1 and 3 of Auxiliary Request 1, which require only the current picture to be processed in accordance with those steps. The original divisional and parent applications contain no disclosure of such embodiments.

237. The Defendants contend that the original description is, by contrast, specific as to the treatment of pictures from different layers: pictures in all layers are treated in the same manner. They submit that this is necessary to achieve the stated objective of reducing output delay while preserving the correct output order. In particular, the disclosed teaching requires (i) pictures in the highest layer to trigger the bumping process under features 1.5 and 1.6 and (ii) compliance with a particular decoding order so as to avoid an incorrect output sequence.

238. According to the Defendants, those restrictions arise in particular from the embodiments described with reference to Figure 30 (page 32, line 20, to page 33, line 14 of the divisional application as filed; page 31, line 20, to page 32, line 14 of WO ’066). Since claims 1 and 3 of Auxiliary Request 1 contain neither restriction, the Defendants submit that the amended claims constitute an unallowable intermediate generalisation and therefore contravene Articles 123(2) and 76(1) EPC.

239. They further argue that page 18, lines 5–9; page 20, line 30, to page 21, line 9; and page 27, lines 11–29 of the divisional application as filed (corresponding to page 17, lines 1–6; page 19, line 29, to page 20, line 9; and page 26, lines 11–29 of WO ’066) are silent as to multiple layers. In their submission, the remaining passages relied upon by the Claimant merely define *sps_max_num_reorder_pics[i]* or a corresponding value.

240. The Defendants therefore conclude that neither the divisional application as filed nor the parent application provides a basis for the intermediate generalisation contained in Auxiliary Request 1.

241. The Court considers that, in claim 1 as granted, feature 1.3 requires the “current picture” referred to in feature 1.2 to belong to a layer other than the highest layer. Following the deletion of feature 1.3 in claim 1 of Auxiliary Request 1, the amended claim no longer expressly identifies the layer, or group of layers, to which the current picture must belong. The current picture may therefore belong to the highest layer, unless feature 1.1^{Aux1}, properly construed in the context of the claim as a whole, imposes a contrary limitation.

242. Feature 1.1^{Aux1} provides that the method is “performed on pictures in multiple layers of a multi-layer video sequence comprising multiple layers of pictures”.

243. The Claimant submits that this wording requires the method to be applicable to pictures in more than one layer. In its view, the method must therefore be performed, on at least one occasion, in relation to a picture that does not belong to the highest layer (item 104 of the Reply to the counterclaim for revocation).

244. The Defendants, by contrast, submit that feature 1.1^{Aux1} merely states that the method “comprises” the steps set out in features 1.2, 1.4^{Aux1}, 1.5 and 1.6 (item 426 of the Rejoinder). They contend that amended claim 1 also covers a method in which those steps are performed only in relation to a picture belonging to the highest decoded layer, while pictures in lower layers are subjected to different processing (item 428 of the Rejoinder).

245. The decisive issue is therefore whether, and to what extent, the reference in feature 1.1^{Aux1} to a method performed on pictures in multiple layers restricts the layership of the "current picture" referred to in feature 1.2. In particular, it must be determined whether successive performances of the method necessarily involves processing current pictures belonging to different layers.

246. The Claimant's construction appears to rest on three propositions:
(i) feature 1.1^{Aux1} requires the method defined by the remaining features to be performed more than once;
(ii) the current picture referred to in feature 1.2 changes between successive performances of the method; and
(iii) the highest layer contains only one picture.

247. If those propositions were correct, the Claimant's conclusion would follow: in at least one performance of the method, the current picture referred to in feature 1.2 would necessarily belong to a layer other than the highest layer.

248. The Defendants arguments are understood as dispute of said propositions. They point out that feature 1.2 does not itself specify the layer to which the current picture belongs. Nor, in their submission, does the expression "pictures in multiple layers" in feature 1.1^{Aux1} require the current picture to belong to a first layer during one performance of the method and to a different layer during a subsequent performance. The Court understands the Defendants' case to be that feature 1.1^{Aux1} does not exclude successive performances in which the respective current pictures both belong to the highest decoded layer, provided that other pictures from different layers are also involved in the method. In other words, the claimed steps may concern a single bumping operation relating to one current picture from any layer, notwithstanding the general wording of feature 1.1^{Aux1} (items 426 and 434 of the Rejoinder).

249. The Defendants further argue that, since the specified steps form only part of the method—whose wording is open-ended because it "comprises" those steps—the claim does not clearly require the current pictures in successive performances to be the "pictures in multiple layers" referred to in feature 1.1^{Aux1}, or otherwise to belong to different layers (item 426 of the Rejoinder).

250. For the purpose of resolving that dispute, the Court considers the embodiments described in paragraphs [0132] and [0133] with reference to Figure 30 of the Patent. In each embodiment, the overflow condition set out in features 1.5 and 1.6 is satisfied during the final performances of the method, when pictures are output.

251. In the embodiment described in paragraph [0132], the relevant performances occur after decoding the current pictures B4 and B5. After B4 is decoded, picture I0 is output; after B5 is decoded, picture B5 is output. B4 and B5 belong to different layers: B5 belongs to the highest decoded layer, layer 3, whereas B4 belongs to layer 2. That embodiment is therefore consistent with the Claimant's construction insofar as the current picture referred to in feature 1.2 belongs to different layers in successive performances of the method.

252. The embodiment described in paragraph [0133] concerns temporal scaling and provides for output after decoding B2, B3, and B4. B2 belongs to the second-highest decoded layer, whereas B3 and B4 both belong to the highest decoded layer. Although the layer changes between B2 and B3, the embodiment also shows two successive performances in which the current pictures

belong to the same, highest layer. This supports the Defendants' construction that the layer of the current picture need not change between successive performances of the method although pictures from other layers can be involved, in particular in view of outputting a picture.

253. The Court follows the Defendant in that, under Auxiliary Request 1, the current picture cannot be associated with any particular layer or with a mandatory change of layer.

254. The Court further considers that the amendment introduced by feature 1.1^{Aux1} gives rise to a lack of clarity within the meaning of Article 84 EPC.

255. In particular, the proposed claim does not define with sufficient precision the relationship between the requirement that the method be "performed on pictures in multiple layers" and the "current picture" referred to in feature 1.2. It remains unclear whether the current picture must itself belong to different layers in successive performances of the method, whether only some of the pictures involved in the method must belong to multiple layers, or which pictures are intended to satisfy feature 1.1^{Aux1}.

256. The divergent constructions advanced by the parties in the present proceedings illustrate that the wording of the amended claim is reasonably susceptible to more than one technically plausible interpretation. The Court therefore finds that Auxiliary Request 1 does not clearly define the matter for which protection is sought, contrary to Article 84 EPC.

257. Under Article 69 EPC and the Protocol on its interpretation, the claims must be construed in the light of the description and drawings, while due account must also be taken of the scope of protection conveyed by the claim wording. In this regard, the requirement of legal certainty disallows the introduction of an evident lack of clarity into the claims if this lack is suitable to create variable scopes of protection depending on selective limiting effects that could be derived from the description without excluding a violation of Art. 123(3) EPC. Against that background, the Court does not accept the narrowing propositions underlying the Claimant's construction, for the following reasons.

258. First, the wording of feature 1.1^{Aux1}—"method being performed on pictures in multiple layers"—does not require the method to be performed repeatedly in relation to current pictures within the meaning of feature 1.2. It requires only that pictures belonging to multiple layers be involved in the method.

259. That construction follows from the fact that the claim concerns not only the current picture but also other pictures, including pictures stored in the decoded picture buffer and, in particular, the picture that is output and marked. This is also evident from the embodiment of para. [0132] of the patent, which involves the processing of picture I0, demonstrating that pictures other than the current decoded picture may form part of a method performed on pictures in multiple layers.

260. Feature 1.1^{Aux1} as such does also not identify which of those pictures must belong to the multiple layers. A single performance of either embodiment may therefore satisfy that feature—for example, the performance in which picture I0 is output after decoding B4 or B2, respectively (para. [0132]). The Court accordingly rejects the Claimant's submission that feature 1.1^{Aux1} necessarily requires repeated performance of the method in relation to current pictures belonging to different layers including a layer below the highest layer.

261. Second, even where successive performances of the method are considered, neither the claim nor the description requires the current picture to change layers between those performances.

As paragraph [0133] demonstrates, the current picture referred to in feature 1.2 may belong to the highest layer in one or more successive performances of the method. This is consistent with the construction advanced by the Defendants.

262. The Court further considers that the lack of a clear relationship between feature 1.1^{Aux1} and the particular pictures involved in the claimed method cannot permit the proprietor to select, as circumstances require, different limiting constructions that are not expressed in the claim wording.

263. For the purposes of Article 123(3) EPC, it must therefore be determined whether amended claim 1 confers a broader scope of protection than claim 1 as granted. The Court finds that it does.

264. In Auxiliary Request 1, the current picture referred to in feature 1.2 is no longer restricted to any subgroup of layers. Feature 1.1^{Aux1} does not restore that restriction. In particular, when the claim is construed as a whole and in the light of the disclosed embodiments, the deleted requirement that the current picture belong to "a layer other than the highest layer" is neither expressly nor implicitly captured in the wording "method being performed on pictures in multiple layers".

265. The Court therefore concludes that amended claim 1 of Auxiliary Request 1 extends the protection conferred by claim 1 as granted, contrary to Article 123(3) EPC.

266. The same conclusion applies, *mutatis mutandis*, to amended claim 3, which contains the corresponding limitation concerning pictures in multiple layers but no longer restricts the relevant current picture to a layer other than the highest layer. Amended claim 3 therefore likewise extends the protection conferred by claim 3 as granted, contrary to Article 123(3) EPC.

267. In light of the foregoing, the request to amend the Patent cannot succeed. Auxiliary Request 1 does at least not satisfy the requirements of Article 84 EPC and, independently, extends the protection conferred by the Patent contrary to Article 123(3) EPC. It is therefore not allowable under R. 30 RoP.

7. Conclusion.

268. As a result of the revocation action, the patent at issue, EP'673, is to be revoked in its entirety in the territory of all Contracting Member States in which the patent has effect.

269. Claimant's application to amend the patent is entirely dismissed.

270. Consequently, the infringement action is unfounded and to be dismissed.

8. Value of the case and legal costs

271. 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.

272. The Panel confirms the values provisionally determined by the judge-rapporteur: 1.000.000 EUR for the infringement action and 1.000.000 EUR for the counterclaim for revocation, resulting in an aggregate value in dispute of 2.000.000 EUR for the purposes of the applicable ceiling for recoverable costs.

273. Pursuant to Art. 69(1) UPCA, the Claimant, as the unsuccessful party, shall bear the costs of the infringement action and of the counterclaim for revocation, subject to the applicable ceiling determined in accordance with the Rules of Procedure.

274. 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. The Parties clarified during the oral hearing that, in the present case, they agree that this ceiling also encompasses the costs incurred in connection with (i) the application for provisional measures brought by Ericsson in the course of the main proceedings and (ii) the proceedings under R. 262A RoP concerning the confidentiality regime applicable to these proceedings, including the related appeal proceedings.

275. The Defendants request an interim award of costs in the amount of 100.000 EUR corresponding to 50% of the applicable ceiling.

276. The Court of Appeal has held that "*as a general rule, Art. 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).

277. Applying those principles, the Court considers that the Defendants are entitled to an interim award corresponding to 50% of the applicable ceiling for representation costs, namely 100.000 EUR. There is no indication that ASUSTeK and Arvato 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, including in the proceedings under R. 206 and R. 262A RoP, justify an interim award in the amount requested by the successful parties.

278. 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:

- the European Patent EP 3 076 673 B1 is revoked in its entirety in the territory of all Contracting Member States in which the patent has effect;
- the application to amend the patent is dismissed;

- the Registry shall send a copy of this decision to the European Patent Office and to the national patent office of any Contracting Member States concerned, after the time limit for appeal has expired;
- the infringement action is dismissed;
- the costs of the infringement action and the counterclaim for revocation are to be borne by the Claimant;
- the Claimant shall pay the Defendants an interim award of costs in the amount of 100.000 EUR within 14 days after service of this decision;
- the value in dispute for the infringement action and the counterclaim for revocation is set at 1.000.000 EUR each;
- the ceiling for recoverable costs for the infringement action and the counterclaim for revocation is set at 200.000 EUR in total.

Milan, 6 November 2026.

Pierluigi Perrotti presiding judge and judge rapporteur	Digitally signed Perrotti Pierluigi 2026-11-05 19:37:04 +0100 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet
Alima Zana legally qualified judge	ALIMA ZANA Firmato digitalmente da ALIMA ZANA Data: 2026.11.05 18:21:43 +01'00'
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Christoph Norrenbrock technically qualified judge	Digitally signed Dr. Norrenbrock Christoph Robert 2026-11-05 14:21:09 +0100 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet
for the Deputy Registrar	Digitally signed Ferretti Maddalena 2026-11-06 09:03:52 +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 (Art. 73 UPCA, rule 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. (Art. 82 UPCA, Art. 37.2 UPCS, rules 118.8, 158.2, 354, 355.4 RoP).