

UPC_CFI_495/2025

UPC_CFI_1131/2025

**Decision of the Court of
First Instance of the Unified Patent Court
delivered on 24/08/2026**

HEADNOTES:

1. For competition law reasons, the patent holder is only required to indicate to the patent user one licensing route that satisfies the FRAND requirements (concurring with LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 136).
2. However, there are constellations where the implementer can demand a bilateral licence instead of a pool licence. Such constellations are for example, but non-exclusively, given when the implementer expressed its desire to obtain a multi-standard-licence or to sign cross-licencing agreements with the individual patent proprietors. The same applies when an implementer had already advanced with a significant number of other pool contributors to conclude bilateral licences for the whole pool portfolio.
3. Choosing the bilateral route does not ease the implementer's obligation to show its willingness to sign a licence throughout the course of the negotiations. In particular, an implementer's insistence on bilateral licensing can still indicate unwillingness when the implementer fails to present comprehensible reasons for its decision to opt for bilateral agreements, failed to conclude bilateral agreements with the other SEP pool licensors within reasonable time, and refrained from placing a security. This is even more true when initially being provided a FRAND pool offer.

KEYWORDS:

Exhaustion, Art. 29 UPCA; FRAND defence, Art. 101 and 102 TFEU

CLAIMANT

**Fraunhofer-Gesellschaft zur Förderung der
angewandten Forschung e.V.,**
(Claimant) - Hansastraße 27c - 80686 -
München - DE

Represented by: Dr. Volkmar Henke

DEFENDANT

HMD Global Oy
(Defendant) - Bertel Jungin aukio 9 - 02600 -
Espoo - FI

Represented by: Oliver Bäcker

PATENT IN SUIT

Patent nr.

EP 2 609 590

**Fraunhofer-Gesellschaft zur Förderung der angewandten
Forschung e.V.**

COMPOSITION OF PANEL

Presiding judge	Sabine Klepsch
Judge-rapporteur	Dr. Stefan Schilling
Legally qualified judge	Peter Agergaard
Technically qualified judge	Dr. Christoph Norrenbrock

ORAL HEARING

02. and 03. July 2026

SHORT SUMMARY OF FACTS

- 1 The Claimant sues the Defendant for infringing the European Patent EP 2 609 590 (hereinafter also referred to as the “patent in suit” or “the patent”; Exhibit BP-T 1) by producing and marketing of devices that use Android OS version 9 or later.
- 2 The Claimant is a leading German research organization specializing in applied sciences. It operates numerous institutes across Germany. It is actively involved in the development of (standard-essential) patents, particularly in key technology areas, and participates in standardisation bodies to promote the development of standards. The Claimant is also active in the field of patent licensing for AAC patents, which have also been licensed through the Via AAC patent pool for many years. It is the registered owner of the German, Belgian, French, Italian and Dutch parts of the patent in suit.
- 3 Defendant is a Finnish original equipment manufacturer, manufacturing feature phones, smartphones, tablets and accessories since 2016. It is the only remaining European manufacturer of smartphones.

- 4 The patent in suit is titled *“Apparatus for decoding a signal comprising Transients using a combining unit and a mixer”* and was filed as PCT application on 6 July 2011. It claims priority of US 376980 P from 25 August 2010. The European Patent Office published the grant of the patent in suit in the Patent Bulletin on 20 May 2015. The language of the patent is English.
- 5 With its Statement of Claim dated 04 June 2025 Claimant asserted that Defendant is infringing claims 1 and 13 of the patent in suit. Claimant directs this action against all devices, in particular smartphones and tablets, that use Android OS version 9 or later. It asserts that such devices are manufactured and/or marketed by the Defendant under the Nokia and/or HMD brand, for example, but not limited to, HMD smartphones such as the ‘HMD Pulse’ or ‘HMD Arc’, the HMD tablet ‘HMD T21’, as well as Nokia smartphones such as the ‘Nokia C32’, ‘Nokia G22’ and Nokia tablets such as the ‘Nokia T20’, etc.
- 6 Granted claim 1 of the patent in suit reads as follows:
 1. An apparatus for decoding a signal comprising:

a transient separator for separating an apparatus input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the input signal and such that the second signal component comprises non-transient signal portions of the input signal; a transient decorrelator for decorrelating the first signal component according to a first decorrelation method to obtain a first decorrelated signal component; a further second decorrelator for decorrelating the second signal component according to a second decorrelation method to obtain a second decorrelated signal component, wherein the second decorrelation method is different from the first decorrelation method; a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal; and a mixer, being adapted to receive mixer input signals and being adapted to generate output signals based on the mixer input signals and a mixing rule; wherein the combining unit and the mixer are arranged so that the decorrelated combination signal is fed into the mixer as a first mixer input signal and that the apparatus input signal or a signal derived from the apparatus input signal is fed into the mixer as a second mixer input signal.
- 7 Its granted claim 13 reads as follows:
 13. A method for decoding a signal comprising:

separating an apparatus input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the apparatus input signal and such that the second signal component comprises non-transient signal portions of the apparatus input signal; decorrelating the first signal component by a transient decorrelator according to a first decorrelation method to obtain a first decorrelated signal component; decorrelating the second signal component by a further second decorrelator according to a second

decorrelation method to obtain a second decorrelated signal component, wherein the second decorrelation method is different from the first decorrelation method; combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal; and generating output signals based on a mixing rule, the decorrelated combination signal and the apparatus input signal.

- 8 Via grants pool licenses [REDACTED]
[REDACTED] Via concluded a patent licence agreement with [REDACTED] Exhibit BP 12). The patent in suit is subject to the license Via has granted to [REDACTED]
- 9 Also, Claimant entered into a bilateral license agreement with [REDACTED] It is disputed whether this agreement covers patents, at all.
- 10 Via first contacted Defendant in January 2017 demanding a license for the use of the AAC pool patents. Defendant responded by a list of 13 questions (contained in Exhibit BP 5b). The Via pool provided Defendant with an offer in an in-person meeting of October 24, 2017, showing a power point presentation [REDACTED], containing information on the Licensor Partners of the Via AAC patent pool as well as the License Scope and AAC license fees, [REDACTED].
- 11 Defendant insisted on the option of a bilateral licence from Claimant. Claimant provided the Defendant with a first bilateral offer on 22 December 2017 ([REDACTED]) In this offer, which is in essence identical to its last offer, the Claimant proposed royalty rates as shown in Exhibit BP 6a, p. 12/13.
- 12 Claimant stated that its offer was based on Via's royalty rates for a pool license, with an adjusted [REDACTED] for bilateral licenses and a tiered volume discount structure. Claimant provided with their very first offer in 2017 a redacted, but executed, patent license agreement.
- 13 The Defendant rejected the offer. As reasons, Defendant firstly, argued that, due to an existing license agreement between the Claimant and [REDACTED] and/or – which is disputed – between Via and [REDACTED] it had the assumption that the Claimant's rights from its portfolio were already exhausted, as HMD's smartphones solely operate on the [REDACTED] operating system, which implements the AAC codec provided by the Claimant.
- 14 Secondly, Defendant criticized that [REDACTED]
[REDACTED] Defendant also argued, [REDACTED]
[REDACTED]

- 15 The Defendant reacted with a bilateral counteroffer on [REDACTED] and a revised counteroffer on [REDACTED] Defendant [REDACTED]
- 16 With its second bilateral counteroffer dated 30 October 2018, Defendant [REDACTED] (Exhibit BP 6e, p. 18).
- 17 Claimant took up the discussion for [REDACTED]. It responded with its second bilateral offer on 7 May 2019 with [REDACTED]. It pointed out, however, that Defendant did not provide any information regarding the basis for their calculation, i.e. for instance sales numbers. Claimant argued that it [REDACTED] (Exhibit BP 6f (p.7)).
- 18 Defendant rejected this offer a couple of months later by emails dated September 25, 2019 and 27 November 2019 (Exhibit BP 6g pdf p. 9). In its email September 25 2019 Defendant disclosed [REDACTED]
- 19 [REDACTED], but [REDACTED]
- [REDACTED] Via came back to Defendant on 28 November 2023, demanding the signing of a license agreement. Via sent a copy of the standard licence agreement and an up to date [REDACTED] in which the relevant essential patent claims of the essential patents are mapped to the representative sections of the standard [REDACTED]. The standard rate table for the Via pool again offered two options (Exhibit BP 5f, p. 109 [REDACTED] n t [REDACTED])
- [REDACTED] Via contacted Defendant again on 2 October 2024 and sent an updated [REDACTED] and the latest version of the [REDACTED]
- 22 Defendant requested in a power point presentation dated May 26, 2024 that Claimant discloses the license agreements that are concluded between Claimant and third parties (Exhibit BP 6j, p. 36). Claimant countered that given these license agreements are no longer in force, it is not obliged to disclose them. Also with its email May 26, 2024, Defendant disclosed sales numbers (see Exhibit BP 6k, p. 2).
- 23 Claimant's last (third) offer is dated 10 April 2025, which also contained the option for a split-rate based on the country. Claimant gave the [REDACTED]

[REDACTED]

■ Meanwhile in March/April 2025 Claimant signed its only bilateral AAC license agreement with a third company [REDACTED] which came into force 1 June 2025. The [REDACTED] Agreement [REDACTED]

[REDACTED]

25 Defendant did not provide a security.

STATEMENT OF THE FORMS OF ORDER SOUGHT BY THE PARTIES:

- 26 Claimant requested changes to its operational requests initially laid out in the Statement of Claim with its Reply to the Defence (track-change version, Exhibit BP 15), dated 08 December 2025 – which were granted by the judge-rapporteur in the interim conference. At the oral hearing, Claimant declared to make its defence to the counterclaim according to Auxiliary Request I unconditional and limited its request to the wording of the patent as set out in Auxiliary Request I accordingly.
- 27 Hence, Claimant finally requests according to its SoC, its Reply (08 December 2025), and the declaration in the oral hearing (02 July 2026):

A. Defendant is ordered

I. 1. to cease and desist from offering, placing on the market, using or importing or processing or storing for the aforementioned purposes in the Federal Republic of Germany, the French Republic, the Republic of Italy, the Kingdom of Belgium and the Kingdom of the Netherlands, devices for decoding a signal, in particular smartphones or tablets that use Android version 9 or higher and make use of the USAC standard, comprising the following components:

a transient separator for separating an apparatus input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the input signal and such that the second signal component comprises non-transient signal portions of the input signal;

a transient decorrelator for decorrelating the first signal component according to a first decorrelation method to obtain a first decorrelated signal component;

a further second decorrelator for decorrelating the second signal component according to a second decorrelation method to obtain a second decorrelated signal

component, wherein the second decorrelation method is different from the first decorrelation method;

a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal;

wherein the combining unit is adapted to combine the first decorrelated signal component and the second decorrelated signal component by adding the first decorrelated signal component and the second decorrelated signal component;

and a mixer being adapted to receive mixer input signals and being adapted to generate output signals based on the mixer input signals and a mixing rule;

wherein the combining unit and the mixer are arranged so that the decorrelated combination signal is fed into the mixer as a first mixer input signal and that the apparatus input signal or a signal derived from the apparatus input signal is fed into the mixer as a second mixer input signal.

(Direct infringement of claim 1 of EP 2 609 590 B1, in the form set out in Auxiliary Request 1 - Exhibit BP-AR 1)

I.2. to cease and desist from offering or offering to supply in and for the use in the Federal Republic of Germany and/or the French Republic and/or the Republic of Italy, and/or the Kingdom of Belgium and/or the Kingdom of the Netherlands, means, namely smartphones and tablets that use Android OS version 9 or higher and make use of the USAC standard, and which are suitable and intended for applying a method for decoding a signal, comprising the following steps:

separating an apparatus input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the apparatus input signal and such that the second signal component comprises non-transient signal portions of the apparatus input signal;

decorrelating the first signal component by a transient decorrelator according to a first decorrelation method to obtain a first decorrelated signal component;

decorrelating the second signal component by a further second decorrelator according to a second decorrelation method to obtain a second decorrelated signal component, wherein the second decorrelation method is different from the first decorrelation method;

combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal by adding the first decorrelated signal component and the second decorrelated signal component;

and generating output signals based on a mixing rule, the decorrelated combination signal and the apparatus input signal.

(Indirect infringement of claim 13 , , of EP 2 609 590 B1, now claim 12 in the form set out in Auxiliary Request 1 - Exhibit BP-AR 1)

II. at their own expense,

1. to recall from commercial customers the infringing products pursuant to Sec. A.I.1 and placed on the market in Federal Republic of Germany, the French Republic, the Republic of Italy, the Kingdom of Belgium and the Kingdom of the Netherlands since August 6, 2018, by written notice referring to the patent infringing condition of the products as established by decision of the Unified Patent Court and with a binding commitment to reimburse any fees as well as to assume all necessary packaging and transport costs, including customs and storage costs associated with the return, and to take back said products; Claimant is to be provided with a sample of the recall letter as well as a list of recipients including names and postal addresses or, at Defendant's option, an electronic copy of all recall letters.

2. to definitively remove the infringing products pursuant to Sec. A.I.1, which have been placed on the market since August 6, 2018, from the distribution channels, taking in particular the following measures:

a. Defendant shall take all possible and reasonable measures to identify the locations and owners of such products referred to in Section A.I.1.

b. To the extent that Defendant themselves has legal or actual control over such products referred to in Section A.I.1., they must take all legally permissible and reasonable measures so that these products come into, and remain in, the immediate possession of Defendant.

c. To the extent that Defendant does not have legal or actual control over such products referred to in Section A.I.1., they must take all legally permissible and reasonable measures either (i) so that persons holding claims for surrender or destruction against those having control over said products assert such claims, or (ii) support these persons in asserting their claims.

3. destroy the infringing products referred to in Sec. A.I.1., which are directly or indirectly within their possession and/or ownership, or alternatively deliver them up for destruction by a bailiff appointed by Claimant.

III. to provide Claimant with information in an electronic, organized, computer-searchable directory on the extent to which they have committed the acts referred to in request A.I. above since August 6, 2018, stating

1. the origin and distribution channels of the infringing products broken down by year, and the names and addresses of the commercial customers;

2. the quantities produced, manufactured, delivered, received or ordered, as well as the price obtained for the infringing products; and

3. the identity of any third person involved in the production or distribution of the infringing products or in the use of the infringing process; and

4. the advertising operated, broken down by advertising media, their circulation, distribution period and distribution area, in the case of Internet advertising, the domain, the access figures and the placement periods,

5. the prime costs broken down by the individual cost factors and the profit generated, whereby electronic copies of the relevant documents (namely invoices) are to be submitted as proof of the information, whereby details outside the required information requiring confidentiality may be redacted;

IV. to pay Claimant an amount of EUR 219,000 as an interim award of damages.

B. Defendant is obligated to compensate Claimant for all damages that Claimant has suffered and will suffer as a result of the acts set forth in request A.I. above, committed since August 6, 2018.

C. Claimant is permitted, at Defendant's expense, to announce and publish the decision in whole or in part in public media, in particular in but not limited to the magazine "connect" and on "Heise online".

D. In case of any violation of the order under requests A.I., A.II. and/or A.III. above, Defendant shall pay a penalty payment to the Court in the amount of

- up to EUR 100,000 for each day of violation of the order pursuant to A.I.,
- up to EUR 50,000 for each day of violation of the order pursuant to A.II., and
- up to EUR 10,000 for each day of violation of the order pursuant to A.III.,

E. Defendant shall bear the costs of the proceedings.

F. The judgment is directly enforceable. In the event that a security is ordered, Claimant is permitted to provide it also in the form of a bank or savings bank guarantee, and the amount of the security is determined separately for the individual enforceable parts of the judgment, with the following individual amounts proposed:

Injunction: EUR 1,000,000.-

Recall and Destruction: EUR 350,000.-

Information: EUR 150,000.-

Interim award of damages: the amount to be enforced

28 In addition, Claimant requests:

I. Defendant's requests under I. – IV. and VI., as well as the requests in the alternative under VII. – XI. in the Statement of Defense Part I are rejected.

II. Defendant's request for a stay of the proceedings pursuant to R. 266(5) RoP and referral of the questions as set out on pages 60 and 61 of the Statement of Defense Part II. is rejected.

29 With regard to the requests in Defendant's Counterclaim for revocation Claimant requests:

III. Defendant's Counterclaim for revocation is rejected and EP 2 609 590 is upheld insofar as it exceeds the version of the patent EP 2 609 590 according to Auxiliary Request 1 - Exhibit BP-AR 1.

IV. Defendant bears the costs of the Counterclaim for revocation proceedings.

30 In the alternative, Claimant requests (Reply 08 Dec 2025 and Rejoinder 22 April 2026):

V. Defendant's Counterclaim for revocation is rejected insofar as it exceeds the version of the patent EP 2 609 590 according to

- [...]

- Auxiliary Request 2 - Exhibit BP-AR 2 -

- Auxiliary Request 3 - Exhibit BP-AR 3 -

VI. to grant the claims as set out in the Statement of claim for infringement of the patent-in-suit and as amended in the Reply to the Statement of Defense, with the proviso that claims 1 and 13 as reproduced therein, are to be drafted in accordance with the auxiliary request deemed legally valid by the Court.

31 The Defendant requests with its SoD dated 6 October 2025 and Rejoinder to the Defence to the Counterclaim (11 March 2026), and amendment Rejoinder 22 May 2026

I. that the infringement action be dismissed in its entirety, and

II. that Claimant be ordered to bear the costs of the proceedings and the legal costs incurred by Defendant.

III. the European patent EP 2 609 590 is revoked in the scope of claims 1, 13 and 14 with effect to the Federal Republic of Germany, the French Republic, the Kingdom of the Netherlands, the Italian Republic, the Kingdom of Belgium and

IV. Claimant shall bear the costs of the revocation proceedings.

V. [Non-bifurcation]

VI. [Stay in case of bifurcation]

VII. that the Court rejects Claimant's asserted claims for injunctive relief, recall, removal from distribution channels and destruction as (currently) unfounded.

32 In the alternative to I. and II.,

VIII. that the Court rejects Claimant's asserted claims for injunctive relief, recall, removal from distribution channels and destruction as disproportionate.

33 In the further alternative to I. and II.,

IX. that the judgment is not provisionally enforceable.

34 In the further absolute alternative to I. and II.,

X. that Defendant is permitted to avert enforcement by providing security.

35 Defendant requests in the event that Claimant fails to act within the time limit provided for in the Rules of Procedure or set by the Court, or fails to appear at an oral hearing after being duly summoned,

XI. that a decision by default be issued against Claimant.

36 In response to Claimant's Defence to the Counterclaim for revocation and the Application to amend the patent, Defendant requests:

I. European Patent EP 2 609 590 B1 is revoked in the scope of claims 1 and 13 in view of the claims as granted and in view of the Auxiliary Request with effect to the Federal Republic of Germany, the French Republic, the Republic of Italy, the Kingdom of Belgium and the Kingdom of Netherlands,

II. the infringement action is dismissed also to the extent that Claimant bases it in the alternative under VI. of its Reply on its Auxiliary Requests 1, 2 and 3 and bears also insofar the costs of the proceedings and the legal costs incurred by the Defendant,

III. Claimant bears the costs of the revocation proceedings and the costs for the proceedings relating to the amendment of the patent.

37 With respect to its FRAND defence Defendant requests that the competent Court

a) pursuant to Art. 15(1) of the Regulation 1/2003

asks the European Commission to transmit its opinion on questions concerning the application of Art. 101 and Art. 102 TFEU, specifically on the following question:

Is the SEP owner obliged to offer the license seeker a bilateral license on FRAND terms upon license seeker's request, or can the SEP owner rely solely on the fact that a license for its SEPs is available through a patent pool, while refusing engagement in bilateral license negotiations?

b) pursuant to Art. 15(2) of the Regulation 1/2003

to forward to the European Commission a copy of the written judgment without delay after the full written judgement is notified to the parties, in the event that the Court:

(1) considers it sufficient for the SEP owner to fulfil its FRAND-obligations by offering only a pool licence, even upon the license seeker's request for a bilateral licence, and/or

(2) does not refer the preliminary questions listed below (para. 144) regarding the SEP holder's general obligation to offer the license seeker a bilateral license upon request to the CJEU.

c) pursuant to Art. 15(2) of the Regulation 1/2003

to forward to the European Commission a copy of the written judgment without delay after the full written judgement is notified to the parties, in the event that the Court

(1) does not follow the European Commission's approach set out in its Amicus Curiae brief dated 15 April 2024 submitted in the proceedings before the Higher Regional Court Munich (docket-no: 6 U 3824/22 Kart) regarding the strictly sequential assessment of the reciprocal FRAND-obligations of the SEP owner and the license seeker set forth by the CJEU in its Huawei vs. ZTE decision (C-170/13) and/or

(2) does not refer the preliminary questions listed below (para. 79) regarding the assessment of reciprocal FRAND-obligations under Huawei vs. ZTE (C-170/13) to the CJEU.

RELEVANT PROCEDURAL STEPS

38 On request of Defendant Claimant was ordered by the judge-rapporteur on 19 December 2025, based on the mutual agreement found during the case management hearing on 16 December 2025, to submit a copy of the bilateral AAC Patent License Agreement concluded with [REDACTED] which came into force 1 June 2025, subject to that the document is classified as confidential information. Claimant provided the document on 16 January 2026.

39 The other requests for the production of evidence by Defendant were dismissed.

POINTS AT DISPUTE

40 The parties are in dispute with respect to the claim construction, validity of the patent in suit and infringement. The Defendant also raised an exhaustion defence and a FRAND defence, both of which are disputed by Claimant.

CLAIMANT'S POSITION

CLAIM CONSTRUCTION

41 Claimant asserts that there is no dispute over claim interpretation as both parties agree that the patent requires that the apparatus input signal is separated into two non-zero components, a first signal component comprising transient signal portions of the input signal and a second signal component comprising non-transient signal portions of the input signal.

42 Claimant argues that according to the claim it is "the input signal, including all frequency ranges of the input signal" as well as all its time slots, that is to be separated into non-zero transient and non-transient components – for example by identifying some frequency ranges of the input signal as a first signal component comprising transient signal portions of the input signal and other frequency ranges of the input signal as a second signal component comprising non-transient signal portions of the input signal, cf. paras. [0038] and [0058] et seq. of the patent. One further example would be to limit the processing range to frequency band indices $k \geq 8$ of a hybrid QMF filter bank as used in

MPS...” (Patent, [0059] et seq.). Thus, according to Claimant the patent requires a separation, not just an identification or classification. It is not sufficient if “transient signal portions” are merely identified or classified as opposed to “non-transient signal portions”. Rather, the patent requires that the “transient signal portions” and the “non-transient signal portions” of the respective components are separated, specifically by sending them different ways – i.e., towards different decorrelators .

- 43 Claimant asserts that it follows from the correct construction of the relevant feature that the decorrelated combination signal differs from the first/second decorrelated signal component. Since the first and second signal components must both be non-zero, so must be the first and second decorrelated signal components derived therefrom, i.e., the output of the decorrelators . As a result, their combination, i.e., the decorrelated combination signal , must be different than any one of the first and second decorrelated signal component.

VALIDITY

- 44 Claimant is of the opinion that the patent’s priority claim is valid. Despite the fact, that the relevant feature defines a combination (“combining”) of the decorrelated signal components, whereas the priority document US 61/376,980 P (Exhibit HLCC 4) (merely) discloses their “addition”, Defendant fails to identify a single operation that could be regarded as a combination of decorrelated signal components, but not as an addition of decorrelated signal components as per the disclosure of HLCC 4.
- 45 Claimant argues that even if “combining” did in fact cover more than “adding”, i.e., if “combining” was a generalization of “adding”, this generalization would not be inadmissible. Nevertheless, at least that part of the claim that pertains to an “adding” of decorrelated signal components would still enjoy priority and thus retain the priority document’s filing date as effective date according to the EPO case-law established in decision G 1/15.
- 46 Claimant further argues that regarding the lack of literal disclosure of a mixing rule, the skilled person directly and unambiguously learns from HLCC 4 that the “transient handling scheme” as per the priority document can effectively be combined with any mixer applying any “mixing rule”, and in particular with mixers as used in “Parametric Stereo (PS)” or “MPEG Surround (MPS)”. Notably, the priority document recaps both and outlines that their mixer(s) may effectively mix the original (“dry”) and the decorrelated (“wet”) signal in any desired form – i.e., they may apply just any “mixing rule”. In effect, fig. 3 of the priority document discloses a “mixer” in some more detail.
- 47 Claimant is of the opinion that the ISO working document of a draft version of the USAC (Exhibit HLCC 7) cannot be considered publicly available on that date from the outset, or any date before the filing date of the patent, as it was not to be published, at all. MPEG was established as a set of working groups of the International Organization for Standardization (ISO). Thus, it is and was bound by the common ISO rules. Thus, if anything, HLCC 7 was circulated to a limited number of people, all bound by a

confidentiality obligation. In addition, HLCC 7 exclusively teaches an “adding” of decorrelated signal components, and hence cannot anticipate any form of “combining” that does not amount to an “adding” of decorrelated signal components. Also, if HLCC 7 discloses “some matrix-based mixing process” , this would be exactly what the embodiment of fig. 3 of the priority document represents, for which HLCC 7 is no prior art to begin with.

- 48 Regarding the inventive step attack, Claimant asserts that the document “MPEG Surround (MPS)” (Exhibit HLCC 8) does undisputedly fail to disclose a “combining unit” , which means that it must inherently also fail to disclose its arrangement relative to the “mixer”. The combination document HLCC 9 discloses none of this, either, as was already established during examination of the patent. In this document any and all signal portions of the “apparatus input signal” take this exact same “channel audio recovery path”, irrespective of whether they are “transient signal portions” or “non-transient signal portions”. The only difference made between “transient signal portions” and “non-transient signal portions” is the “mode of randomized angle decorrelation”. Accordingly, in the “decoding arrangement” of HLCC 9 the “apparatus input signal” (“recovered mono composite audio”) is neither split up nor, consequently, (re-)combined after decorrelation in the sense of the patent. HLCC 9 also fails to disclose two separate decorrelators.

INFRINGEMENT

- 49 Claimant asserts that the attacked embodiments inevitably make use of the teaching of the patent in suit. That is because, USAC, while directed at implementing a different audio coding technology, expressly incorporates elements of the MPEG Surround standard where applicable. This is made clear on the very first page of the USAC standard, where reference is made to the MPEG Surround standard (“ISO/IEC 23003-1, Information technology — MPEG audio technologies — Part 1: MPEG Surround”) as one of two “normative references” “indispensable” for the application of the document, i.e., the USAC standard, itself. Decoders compliant with the USAC standard must necessarily be capable to process an input signal as specified, both in case the “TSD tool” is not activated as well as in case it is activated.
- 50 Claimant further argues that specifically with reference to the decorrelation block as shown in its fig. 22, the USAC standard uses the so-called Quadrature Mirror Filter (QMF) representation of the input signal, commonly used in the pertinent technical field. In the matrix $v_X^{n,k}$ is a scalar value representing the input signal $M0$ in the QMF domain at the n -th slot and in the k -th subband. This means, $v_X^{n,k}$ represents the n -th and k -th time-frequency pair of the input signal $M0$ in the QMF domain. With the first signal component being the transient stream $v_{X,Tr}^{n,k}$ and the second signal component being the non-transient stream $v_{X,nonTr}^{n,k}$. As a result, the actual input signal $M0$ comprises the entirety of all time-frequency pairs (signal portions) for all possible values of n and k . This implies that not only a single time-frequency pair is input into the decorrelator block as per fig. 22 of the

standard but all time-frequency pairs for all possible values of n and k . To be sure, the standard thereby realizes exactly the embodiment described in paragraph [0058] et seqq. of the patent, except that it applies a slightly lower cutoff for the frequency-dependent separation rule, i.e., $k \geq 7$ instead of $k \geq 8$.

- 51 Claimant states that as with the input signal, the USAC standard uses the QMF representation $d_x^{n,k}$ in fig 22 as a shorthand notation for the decorrelated combination signal but nevertheless means to prescribe that the defined operations are applied to all (decorrelated) signal components.

EXHAUSTION DEFENCE

- 52 Claimant points out that [REDACTED] also develops and manufactures other products and that a concluded license between Via and [REDACTED] does not necessarily cover the Android system. [REDACTED]

- 53 Claimant argues that the passages from the “[REDACTED]” cited by Defendant itself prove that the Android OS software cannot be [REDACTED] under this agreement. The Android OS software, however, [REDACTED]

[REDACTED] Unlike consumer applications that are designed for immediate installation and use by any end user without technical expertise, Android OS requires significant technical intervention before it can function on a device. While it is correct that [REDACTED] is a licensee of the AAC patent pool, it is only [REDACTED] Accordingly, [REDACTED] also does not report sales of its Android OS, nor does it pay royalties to Via for it.

- 54 Claimant asserts to have made it very clear to Defendant already in 2018 that there [REDACTED]

FRAND DEFENCE

- 55 Claimant criticises that Defendant cites the Commission’s brief from proceedings it lost, while concealing the authoritative judicial determination that followed. The formalistic approach advocated in the amicus curiae brief is not only against the established jurisprudence of the Member States but also rejected by the Courts of the UPC.

- 56 Claimant is of the opinion to have, in contrast to Defendant, complied with their FRAND obligations. That is because Claimant provided Defendant with several bilateral FRAND license offers, of which the last one was conveyed on April 10, 2025. In addition, Defendant has also been provided with several FRAND pool offers, the latest being received by Defendant in October 2024. Pursuant to case law of the UPC and German national courts (see above), it is already sufficient if one of these licensing routes is offered by a claimant.
- 57 Claimant further argues that it did not block the disclosure of the allegedly “highly relevant [REDACTED] to eliminate HMD’s exhaustion concerns”, as it had already informed HMD on October 22, 2018 that [REDACTED].
- 58 Claimant is of the opinion that [REDACTED]
- 59 With respect to the pool offer Claimant argues that Via had done everything that was necessary to satisfy the requirements for an offer under the Huawei v. ZTE framework. The pool [REDACTED]
- [REDACTED] Furthermore, the presumption that Via’s most recent offer complies with FRAND principles is also based on the fact that the AAC pool constitutes, with nearly 1,000 licensees, the gold standard for licensing in the area of audio coding. A list of all pool licensee’s is available on Via’s website (Exhibit BP 4).
- 60 Claimant claims that over the course of seven years and up to the present day, Defendant had not raised a single detailed complaint with Via or against any of the offers provided by Via.
- 61 With respect to the demanding of a bilateral licencing path Claimant argues that Defendant provided no evidence of the commercial benefits it claims to pursue. Defendant asserts that [REDACTED]
- [REDACTED] However, Defendant provided no evidence that [REDACTED]
- [REDACTED] Claimant asserts that regarding itself there are no [REDACTED] that Defendant has sought for, nor is there any

long-standing business relationship. The same seems also to be true for the other licensors of the pool.

62 Referring to its bilateral offers, Claimant argues that it had provided Defendant with a minimally redacted concluded patent license agreement with Claimant's first offer of 2017, which inter alia, [REDACTED] which was still active at that time and which could have served as source of information to Defendant, if Defendant had actually considered it. According to Claimant, [REDACTED] and did never comment on the redacted agreement contained in the offer of 2017 during those initial years. At this point in time, [REDACTED]

63 Claimant states that its royalty rates [REDACTED]. Claimant asserts [REDACTED] Via AAC pool, with nearly 1,000 licensees, is [REDACTED]

64 Claimant rejects Defendant's criticism regarding the aging of the patents. When selectively pointing to Claimant's statement that [REDACTED]

65 Regarding the volume discounts Claimant asserts that at least on this specific licensing market, there is a practice of tiered volume discounts which is accepted by nearly the entire worldwide market. There is no indication that nearly 1,000 licensees entered into agreements with Via without the volume discounts being applied.

66 Claimant points out that the Via offer just as Claimant's last (third) bilateral offer contains also an alternative rate structure, offering [REDACTED] in recognition of the reduced patent coverage in those markets. Claimant argues that [REDACTED] when Claimant made its initial offer. However, Claimant claims that it has since become an adopted approach in licensing agreements, which is why Claimant therefore sought to provide Defendant with the opportunity to select the most favourable licensing route for its own circumstances.

67 Claimant claims it to be clear that no compensation is required or sought for devices that do not implement any of the patents in the portfolio, hence with respect to [REDACTED]

68 [REDACTED] is not unreasonable as a bilateral license is considerably more expensive than a pool license and it requires a whole lot more administration and time-

consuming negotiations. [REDACTED]

[REDACTED] had been deducted.

69 Referring to the [REDACTED] [REDACTED] Claimant points out that this was [REDACTED] [REDACTED] and could not have been disclosed to Defendant at a time when it did not yet exist. This is currently the [REDACTED] [REDACTED] The five bilateral license agreements [REDACTED] and which have also been discussed during the R.190 RoP proceedings (cf. Court order of December 19, 2025) all expired before 2024 and thus before the point in time when Defendant started to request the disclosure of comparable “active” license agreements.

70 Claimant explained that in the negotiations [REDACTED]
[REDACTED]
[REDACTED] Claimant asserted that during negotiations [REDACTED]
[REDACTED]. In other words, it was the parties' shared understanding that the overwhelming majority of devices were sold in [REDACTED]
[REDACTED]

71 Claimant explained that [REDACTED]
[REDACTED]
[REDACTED] As reasons, [REDACTED]
[REDACTED]

DEFENDANT'S POSITION

CLAIM CONSTRUCTION

72 Defendant asserts that Claimant explicitly agrees that the claim does not include a scenario in which one of the components of the signal that are separated is set to zero. However, mapping the two signal components to different signal portions in the time domain is not supported by the alleged invention of the patent. The first and second signal components obtained by the transient separator cannot be mapped to two different signal portions in the time domain, i.e. to signal portions having different time indices n . The patent consistently defines the separation such that, for each time index n , the transient component and the non-transient component together represent complementary portions of the same input signal, which are then decorrelated using different methods and recombined on a per- n basis. Rather, the patent defines the separation such that for each index n the transient component and the non-transient component are complementary portions.

73 Defendant points out that the patent requires a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal and that this decorrelated combination signal is being

fed to the mixer . The very rationale for the existence of a combining unit presupposes the presence of distinct elements or components to be combined. Otherwise, the combining unit would lack functional relevance and could not substantiate inventive merit.

- 74 Defendant is also of the opinion that, if the first and second signal components were instead mapped to different time indices n , there would be no point at which their respective decorrelated outputs could be combined as required by the claim. A time-sequential allocation of the components would eliminate the claimed combining step altogether. According to Defendant, this means, also in view of the requirement of a “separation into two signal components” has to be construed in a way that the first and second signal component which are the result of the transient separation are precisely these two components whose decorrelated outputs are then again recombined before being fed to the mixer.

VALIDITY

- 75 Defendant is of the opinion that asserted claims 1 and 13 cover subject-matter that is not directly and unambiguously disclosed in the priority document HLCC 4. According to Defendant it is clear that asserted claims 1 and 13 cover any arbitrary combination, while the priority document discloses only the specific case of an addition. Just to name a few examples not covered by the priority document, the wording “combination” covers any form of averaging, multiplication, convolution and many more. None of these ways of combining is directly and unambiguously disclosed in the priority document. As claims 1 and 13 are not “a generic ‘OR’ claim” partial priority cannot be acknowledged in the present case on EPO’s G 1/17 decision.
- 76 Defendant argues that even if partial priorities are acknowledged, the part not entitled to priority is not novel over the ISO working document HLCC 7. If the USAC standard is interpreted in a way that signal components relating to different frequency bands are combined, also HLCC 7 must disclose such combination. Furthermore, HLCC 7 discloses different upmixing schemes that fall under the broad wording of the independent claims as granted but are not disclosed in the priority document.
- 77 Defendant asserts that the skilled person participates in MPEG standardization work and therefore has access to the MPEG database. Uploading HLCC 7 to the MPEG database is the standard mechanism by which MPEG contributions are disseminated to a wide circle of registered participants for review and discussion in the standardization process and beyond. Once uploaded, HLCC 7 was retrievable by everyone with access to the MPEG database, which comprises numerous independent entities and individuals, including the person skilled in the art. But, also irrespective of the question whether the presently applicable skilled person participates in the standardization, the understanding that contributions to MPEG meetings, which are uploaded to the MPEG database, such as HLCC 7, are publicly available in the sense of Art. 54 (2) EPC, has already been established by the EPO Boards of Appeal in its decision T 2239/152 dated 19 June 2019.

78 Defendant further claims that the combination of HLCC 8 and HLCC 9 renders the subject-matter of claims 1 and 13 obvious. When a separation into different frequency bands is considered a separation into first and second signal component this requires the re-combination of the different frequency bands representing the first and second signal components. The procedure with respect to dividing and combining frequency bands is the same in HLCC 8 and the USAC standard. HLCC 9 also discloses such a separation of the apparatus input signal into different components in figure 3. In the time domain, the apparatus input signal of HLCC 9 is separated into frames, which are further separated into blocks. As disclosed in para. [0047] and [0048] of HLCC 9, a transient flag indicates for every block whether the block is a transient signal component or not. In addition, HLCC 9 also discloses that the apparatus input signal is separated in the frequency domain (similar to HLCC 8 and the alleged infringement), which results in a different decorrelation of different frequency parts. Similarly, HLCC 9 defines a function denoted as “controllable decorrelator”, which uses a different function to decode a time snippet of the apparatus input signal depending on the presence of a transient, see paragraphs [0059] to [0062].

INFRINGEMENT

79 Defendant challenges the assertion of infringement. It argues that mapping the separation of the input signal now on the entire input signal and stating that “over time” the entire input signal was divided in a first (transient) component and into a second (non-transient) component, entirely disregards that according to the patent the decorrelated outputs of exactly these two components have to be recombined into one single combination signal again. However, the Claimant is wrong in assuming that only because the (+) sign obviously applies to every single time-frequency pair, that it follows that also signals in a different frequency/time domain are being cross-combined in the sense of the patent.

80 Defendant asserts that mapping the first and second signal component on signal portions of different frequency bands, i.e. on signal portions with different indices “k”, does not result in a “combination” . The individual components of different frequencies are not combined. Instead, the processing remains multi-channel (64 channels), without any cross-combination or merging between channels. The decorrelator outputs of different frequency bands of the input signal in one n-th time slot are not (re-)combined.

81 Defendant further argues that in case the infringement mapping is based on the particular time-frequency pair as shown in decorrelator block D (Sec. 7.11.2.4 of the USAC standard, Exhibit BP-T 5), these features are not realized in the attacked devices. In the USAC standard no two different decorrelation methods are applied to the two signal components of a time-frequency pair inputted into the “decorrelator block D”. Considering the particular time-frequency pair, there is only one signal component as in this particular time-frequency pair the other component is always set to zero. Hence, in the USAC standard only one decorrelation method is applied to one time-frequency-pair $v_X^{n,k}$. No different assessment is justified even considering that (in some instances) a situation may arise where the output of the non-transient decorrelator is non-zero (even

though the non-transient signal portion is zero for that given (n,k)-pair). Reason for this is, that there is simply no “second” signal component that is being decorrelated. Basing the infringement allegation on considering the entire input signal ignores that different frequency bands of the input signal will not be re-combined by cross-interaction in the MPS module.

82 Defendant claims that this is already evident from fig. 10 of the MPEG standard which illustrates separating the apparatus input signal into signal components of different frequencies (different frequency bands) and re-combining decorrelated signal components of different frequencies. Section 4.3 of the USAC-standard even refers to HLCC 8 for the combination of signal components of different frequency bands.

83 EXHAUSTION DEFENCE

84 Defendant points out that the allegedly infringing technology is embedded in the AAC Codec, which is an integral part of [REDACTED] Android operating system. Defendant refers to the fact that [REDACTED] is a licensee within Via's AAC pool licensing program and thus has also obtained a patent license under the Claimant's AAC patents (including the patent in suit) as said patents are part of the Via pool. Defendant is of the opinion that the one and only economically viable use of said licensed AAC codec or operating system is the integration into mobile devices, such as the devices marketed by HMD. Hence the exhaustive effect resulting from the patent license Via – on behalf of the Claimant – has granted to [REDACTED] also covers the attacked embodiments. As Claimant is of the opinion that the attacked, allegedly infringing technology is an integral part of Android, it is also covered by said agreement.

85 Defendant asserts that upon examining Via's "[REDACTED]" it becomes evident that Via has explicitly granted consent for the marketing not only of devices or software manufactured by the licensee itself but also for the marketing of a device incorporating said software. The Fraunhofer FDK AAC Codec qualifies [REDACTED]

86 Defendant is of the opinion it could even be left open whether [REDACTED]

87 The mere presence of a disclaimer on [REDACTED] website, which refers to the need for a patent license, does not preclude the effect of exhaustion in the present case. Exhaustion is a factual matter that arises solely from [REDACTED]

88 In addition, Defendant argues that exhaustion may also result from a bilateral license agreement between the Claimant and [REDACTED]. Given that the Claimant serves as a supplier for [REDACTED], Defendant, in letters dated [REDACTED] and [REDACTED], expressed its concerns that the Claimant's rights are already exhausted due to a bilateral license agreement between the Claimant and [REDACTED].

FRAND DEFENCE

89 Defendant is of the opinion that the CJEU's decision in Huawei v. ZTE does not only provide for a framework concerning the out-of-court licensing negotiations but also provides for a judicial order of examination when it comes to the assessment of a FRAND defence. Defendant refers to the European Commission's Amicus Curiae brief dated 15 April 2024, filed in the context of litigation between VoiceAge and HMD (Exhibit HL-FRAND 7(a)).

90 Defendant is of the opinion that contracting obligations under antitrust law require the SEP-holder (the Claimant) to engage in bilateral license negotiations upon the license seeker's (HMD) request, and cannot simply refer the license seeker to the possibility of a pool license. The market imbalance of licensing of technology rights, which is crucial for a functioning competition, is exacerbated when SEP holders form patent pools without an obligation to license bilaterally. The already existing market dominance of individual SEP holders is further strengthened by combining their rights with those of other SEP holders, thereby enabling the patent pool to exercise joint market power see (published drafts of the revised Technology Transfer Block Exemption Regulation (TTBER) and Technology Transfer Guidelines (C/2025/5024, para. 279). Once the license seeker exercises its right to obtain a bilateral license – as the TT Guidelines state that the license seeker “should be allowed to acquire a license outside a pool” – the SEP holder is required to comply with that request. Forcing the license seeker to accept a pool license – especially when the pool is not a party to the proceedings and the SEP-holder cannot negotiate on its behalf – creates an imbalance and coerces the license seeker into accepting a pool license agreement, despite justified FRAND-objections to the pool offer and a legitimate request for bilateral negotiations

91 Defendant asserts that Via mutually agreed with Defendant that Defendant will exclusively conduct bilateral license negotiations with the respective Via-licensors instead of taking a Via pool license. Via indicated that the Defendant has the option to negotiate bilateral licenses directly with the individual licensors instead of taking a pool license in the same first letter (exhibit HL – FRAND 3). And finally, the Claimant had explicitly confirmed that the decision whether to pursue a pool licence or a bilateral licence, rests with the license seeker. Given the (mostly) ongoing bilateral negotiations between the Claimant and HMD from [REDACTED] to the present, the Claimant was already fully aware of the [REDACTED]

- 92 Defendant argues that while the Claimant cannot rely on any actions taken by the Via pool to fulfil its own bilateral FRAND obligations from the outset, all efforts by the Claimant to present its bilateral offer from 22 December 2017 and its conduct to date as FRAND have been unsuccessful. Defendant asserts that one of the main obstacles to concluding a bilateral licence agreement with the Claimant is the Claimant's ongoing refusal [REDACTED]
- 93 Defendant claims that Claimant had not provided any evidence to show that [REDACTED]. The discrepancy between the Headline Rate and the actual agreed royalty rate is also [REDACTED]
- 94 Defendant criticises that Claimant refuses to disclose [REDACTED]. In addition, [REDACTED]. Even if one were to assume that [REDACTED] could be added to a certain – justified – extent, this would fundamentally presuppose that such [REDACTED] was applied to pool rates actually implemented in practice.
- 95 Defendant argues that the direct application of the "[REDACTED]" approach fails – [REDACTED]
- 96 Defendant considers [REDACTED] being unFRAND as they highlight that the "standard rate" for royalties has been set artificially high, with discounts only available at [REDACTED] –, thereby not serving as a legitimate basis for applying [REDACTED] discounts.
- 97 Defendant is of the opinion that it was nevertheless going beyond its obligations in the interest of advancing negotiations and achieving the conclusion of a FRAND license agreement, submitted FRAND counteroffers to the Claimant on [REDACTED]
- 98 Regarding the comparison with the [REDACTED] Defendant is of the opinion that one has to calculate [REDACTED]. Based on Claimant's premise, [REDACTED]

[REDACTED]

99 Defendant argues that [REDACTED]

[REDACTED]

Defendant argues that [REDACTED]

[REDACTED]

100 Defendant is of the opinion that [REDACTED]

[REDACTED]

101 On an auxiliary basis, Defendant claims that the Claimant's requests are too far reaching. First, the requested decision covers an excessively long time period. Second, parts of the requests are insufficiently specified. Third, the claims are also partially time-barred. Forth, the claim for injunctive relief, recall, removal and destruction are disproportionate and are therefore not to be granted. Fifth, even beyond these general deficiencies, the requests are to be dismissed in detail, at least in part.

102 Regarding any additional arguments brought forward by the parties' reference is made to the parties' submissions and exhibits and to the audio recording of the oral hearing.

GROUND FOR THE ORDER

103 Claims 1 and 13 (now claim 12) of the patent are unconditionally maintained in the wording of Auxiliary Request I. On this basis, the infringement action is well-founded whereas the counterclaim for revocation is unfounded. The Defendant did not successfully question the validity of the patent in suit (see below section F.). The attacked embodiments using Android OS 9 or higher make literal use of the features of claims 1 and 13 (now 12) of the patent (see below section G.). The exhaustion defence is without merit (see below section H.). The Defendant cannot successfully raise a FRAND defence and thus the claimant's claims are not precluded by the Defendant's FRAND defence based on Article 102 TFEU (see below section J.).

A. APPLICANT'S ENTITLEMENT TO BRING ACTIONS

104 Claimant's entitlement to bring the present action against Defendant is not disputed.

B. INTERNATIONAL JURISDICTION

105 The UPC's international jurisdiction and the LD Hamburg's competence is not disputed. According to R. 19.7 RoP this shall be treated as a submission to the jurisdiction of the Court and the competence of the division chosen by the claimant.

C. ADMISSIBILITY OF CHANGE OF CLAIM, R. 263

106 The change of claims requested with its Reply were not contested and granted by the judge-rapporteur in interim conference. The change of claims with respect to maintaining the patent in the wording of Auxiliary Request I is an unconditional limitation that shall always be granted according to R. 263.3 RoP. The same is reflected in R. 30.1 lit. c) RoP with respect to an unconditional amendment of the patented claim.

D. ADMISSIBILITY OF AR

107 The auxiliary requests I to III fulfil the criteria according to R. 30.1 and 30.2 RoP and were granted into the proceedings in the interim conference. The Defendant were given the right to be heard with respect to the subsequently introduced AR III.

E. THE PATENT

I. BACKGROUND

108 The patent in suit relates to the field of upmixing of audio signals in the context of audio decoding. In particular, the patent in suit addresses mono-to-stereo decoding of audio signals comprising transients (para. [0001] of the patent). It claims an apparatus for decoding an audio signal (claim 1), a corresponding method for decoding an audio signal (claim 13), and a computer program implementing the method (claim 14).

109 Audio processing and/or decoding has advanced in many ways. In particular, spatial audio applications have become more and more important. Audio signal processing is often used to decorrelate or render signals. Moreover, decorrelation and rendering of signals is employed in the process of mono-to-stereo-upmix, mono/stereo to multi-channel upmix, artificial reverberation, stereo widening or user interactive mixing/rendering, para. [0002] of the patent.

110 Several audio signal processing systems employ decorrelators. An important example is the application of decorrelating systems in parametric spatial audio decoders to restore specific decorrelation properties between two or more signals that are reconstructed from one or several downmix signals. The application of decorrelators significantly improves the perceptual quality of the output signal, e.g., when compared to intensity stereo. Specifically, the use of decorrelators enables the proper synthesis of spatial sound with a wide sound image, several concurrent sound objects and/or ambience, para. [0003] of the patent.

111 Examples of known mono-to-stereo-upmixers are illustrated in figures 1 and 2 of the patent. These known upmixers are in line with the pre-published ISO/IEC International Standard "Information Technology- MPEG audio technologies-Part1: MPEG Surround",

ISO/IEC 23003-1:2007 (in the following “MPEG Surround Standard”, submitted as Exhibit HL 2), which is cited in para [0018] of the patent.

112 More specifically, figure 2 of the patent corresponds to figure 52 of said standard ISO/IEC 23003-1:2007. Figure 1 of the patent is a section of said figure 2 and illustrates the basic elements of such known mono-to-stereo-upmixer. Figure 2 shows prior art decoding of a mono signal to obtain a stereo signal with two channels:

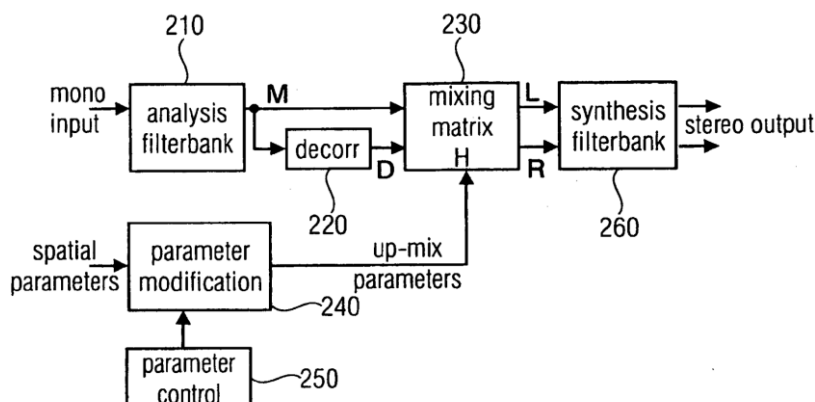


FIG 2
(STATE OF THE ART)

113 The use of decorrelators generally enables proper synthesis of spatial sound with a wide sound image. However, decorrelators are also known to introduce artifacts like changes in temporal signal structure, timbre, etc., cf. [0003]. Specifically, while *lattice allpass decorrelators* – described as state of the art decorrelation techniques employed in spatial audio decoders, like MPEG Surround – act as artificial reverb generators well suited for generating homogeneous, smooth, noise-like, immersive sounds. In particular, they are incapable of generating immersive sound field with the characteristics, e.g., of applause. When applied to applause-like signals, lattice allpass decorrelators tend to temporarily smear the transients in the signals. The undesired result is a noise-like immersive sound field without the distinctive spatio-temporal structure of applause-like sound fields. Further, transient events like a single handclap might evoke ringing artifacts of the decorrelator filters (cf. [0023], [0024]).

114 It is therefore an object of the invention to provide an improved concept for generating a decorrelated signal for decoding a signal, cf. [0028].

115 Accordingly, an apparatus according to an embodiment comprises a transient separator for separating an input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the input signal and such that the second signal component comprises non-transient signal portions of the input signal. The transient separator may separate the different signal components from each other to allow that signal components which comprise transients may be processed differently than signal components which do not comprise transients, para [0029].

116 This shall be implemented by claim 1 and the dependant claims.

117 **Claim 1** as requested by Claimant to be maintained – based on the wording of Auxiliary Request I – can be broken down into the following features:

1. An apparatus for decoding a signal comprising:
 - 1.1 a transient separator for separating an apparatus input signal into a first signal component and into a second signal component
 - 1.1.1 such that the first signal component comprises transient signal portions of the input signal and
 - 1.1.2 such that the second signal component comprises non-transient signal portions of the input signal;
 - 1.2 a transient decorrelator for decorrelating the first signal component according to a first decorrelation method to obtain a first decorrelated signal component;
 - 1.3 a further second decorrelator for decorrelating the second signal component according to a second decorrelation method to obtain a second decorrelated signal component,
 - 1.3.1 wherein the second decorrelation method is different from the first decorrelation method;
 - 1.4 a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal;
 - 1.4.1 wherein the combining unit is adapted to combine the first decorrelated signal component and the second decorrelated signal component by adding the first decorrelated signal component and the second decorrelated signal component; and
 - 1.5 a mixer,
 - 1.5.1 being adapted to receive mixer input signals and
 - 1.5.2 being adapted to generate output signals based on the mixer input signals and a mixing rule;
 - 1.6 wherein the combining unit and the mixer are arranged so that
 - 1.6.1 the decorrelated combination signal is fed into the mixer as a first mixer input signal and
 - 1.6.2 that the apparatus input signal or a signal derived from the apparatus input signal is fed into the mixer as a second mixer input signal.

118 **Claim 13 (now 12)** as requested by Claimant to be maintained – based on the wording of Auxiliary Request I – can be broken down into the following features:

13. A method for decoding a signal comprising:

13.1 separating an apparatus input signal into a first signal component and into a second signal component

13.1.1 such that the first signal component comprises transient signal portions of the apparatus input signal and

13.1.2 such that the second signal component comprises non-transient signal portions of the apparatus input signal;

13.2 decorrelating the first signal component by a transient decorrelator according to a first decorrelation method to obtain a first decorrelated signal component;

13.3 decorrelating the second signal component by a further second decorrelator according to a second decorrelation method to obtain a second decorrelated signal component,

13.3.1 wherein the second decorrelation method is different from the first decorrelation method;

13.4 combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal;

13.4.1. by adding the first decorrelated signal component and the second decorrelated signal component; and

13.5 generating output signals based on a mixing rule, the decorrelated combination signal and the apparatus input signal.

II. CLAIM CONSTRUCTION OF CLAIM 1

1. Principles of claim construction

119 According to Art. 69 EPC in conjunction with Art. 1 of the Protocol on its interpretation, the patent claim is not only the starting point, but the definitive basis for determining the protective scope of a European patent. The interpretation of a patent claim does not depend solely on its exact wording in the linguistic sense. Rather, the description and the drawings must always be taken into account as explanatory aids for the interpretation of the patent claim and not only be used to clarify any ambiguities in the patent claim. However, this does not mean that the patent claim serves only as a guideline and that its scope may extend to what, from a consideration of the description and drawings, the patent proprietor has contemplated. The patent claim is always to be interpreted from the point of view of a person skilled in the art (Court of Appeal, UPC_CoA_1/2024, Order of 13 May 2024, App_8/2024 – VusionGroup SA v Hanshow Technology Co. Ltd et al.; UPC_CoA_335/2023, Order of 26 February 2024, App_576355/2023 - 10X Genomics and Harvard/Nanostring case; Order of 11 March 2024, GRUR-RS 2024, 2829, headnote 2. and para. 73 - 77 - Nachweisverfahren; LD Düsseldorf, UPC_CFI_452/2023, Order of 9 April 2024, p. 13, GRUR-RS 2024, 7207, para. 49). Additionally, the skilled person is taking the purpose of every patent claim into account, to provide the average person skilled in the art with a technical teaching which, when reworked, leads to the intended success of the invention.

2. Person skilled in the art

120 The person skilled in the art typically holds a university degree in electrical engineering, information technology, or physics and has several years of professional experience in the field of audio encoding and its standardization, especially in the upmixing of multi-channel audio signals. Contrary to the Defendant's proposal the skilled person is not defined by someone who participates in working group meetings related to the respective standardization projects and follows them closely, because active participation in the standardization process exceeds the average activity scope of the skilled person. While the skilled person is certainly familiar with standardization and also follows the developments from publications in the field, he or she is not necessarily an advanced scientist or practitioner in the group that contributes in developing the standard itself.

121 Some features of the claim require a closer definition:

3. Features 1.1

1.1 a transient separator for separating an apparatus input signal into a first signal component and into a second signal component

1.1.1 such that the first signal component comprises transient signal portions of the input signal and

1.1.2 such that the second signal component comprises non-transient signal portions of the input signal;

122 Feature group 1.1 defines a transient separator that is intended to separate a received apparatus *input signal* into two *signal components*, comprising of transient portions of the input signal and non-transient portions of the input signal. In other words, the transient separator according to the patent deals with a plurality of signal portions and must separate the apparatus input signal into a first signal component and into a second signal component.

123 The fact that feature 1.1 refers to an "apparatus input signal" while features 1.1.1 and 1.1.2 use the wording "the input signal", does not constitute a difference, but merely synonymously represent the same signal.

a) Input signal

124 The wording of the feature "input signal" refers to the understanding that an input signal comprises two separable *components*, which comprise *signal portions*, which again mean a plurality of signal portions in one signal component.

125 In audio signal processing, especially when performed in the spectral domain, the skilled person always considers a "signal" to comprise a multitude of signal portions including multiple time samples n . This means, that in the field of audio coding an input signal = $v_x^{n,k}$ comprises several samples from n to N . Hence, to the understanding of the skilled person even per time index n the signal does not comprise only one signal portion in the

sense of one sample. There is no indication in the patent that the “input signal” should be something more limited than a “signal” as generally understood by the skilled person, and thus can comprise a multitude of time-frequency-pairs, as well.

- 126 The fact that fig. 3 of the patent shows that the transient separator (highlighted in pink) receives *one* apparatus input signal (highlighted in orange) and outputs *two* different output signals, a first signal component s1 (highlighted in red) and a second signal component s2 (high-lighted in green; colouring by Defendant),

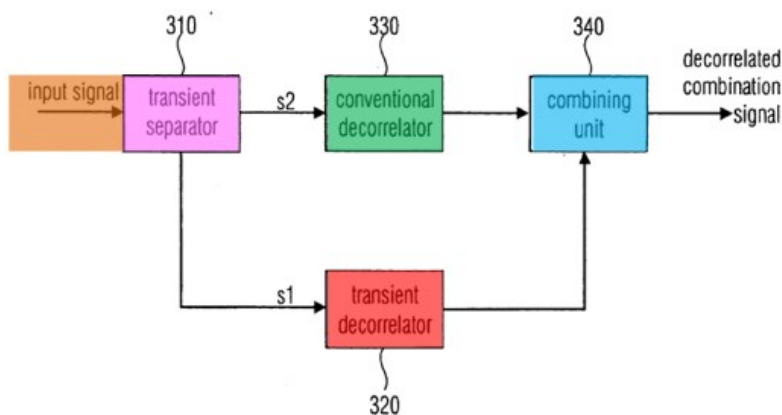


FIG 3

is not a suitable basis to limit the broad wording of the claim with respect to what the term “input signal” generally means in the field audio coding. This figure simply illustrates the basic concept of an apparatus for generating a decorrelated combination signal according to an embodiment, see para. [0030]. The patent refers to the known processes of audio coding and explicitly refers to “MPEG Surround Standard”, see para [0018], hence, it is clear that also figure 3 relates to the form of frequency dependent transient processing, [0046].

- 127 This is supported by the description of the patent which presupposes that the relevant signal processing to occur in the time-frequency domain, as described in para. [0038]:

[0038] In a further embodiment, the transient separator is adapted to separate an apparatus input signal which is represented in a frequency domain. This allows frequency dependent transient processing (separation and decorrelation). Thus, certain signal components of a first frequency band may be processed according to a transient decorrelation method, while signal components of another frequency band may be processed according to another, e.g., conventional decorrelation method. Accordingly, in an embodiment the transient separator is adapted to separate an apparatus input signal based on frequency dependent transient separation information. [..]

- 128 Para. [0038] addresses the form of frequency dependent transient processing, which is again referred to in paras [0046] and [0058], according to which the input signal may be transformed to – or represented in – a frequency domain.

- 129 The patent refers to the fact that there are frequency ranges in which transients are typically more dominant, in particular at high frequencies. Therefore, it teaches that it

can be beneficial from a perceptual point of view to separate the signal in the frequency domain by defining a subband threshold under which a subband cannot be associated with the transient component, as described in para [0059]:

[0059] For best perceptual quality, the transient signal processing may be preferably restricted to signal frequencies in a limited frequency range. One example would be to limit the processing range to frequency band indices $k \geq 8$ of a hybrid QMF filter bank as used in MPS, similar to the frequency band limitation of guided envelope shaping (GES) in MPS.

130 This again, shows the skilled person that the input audio signal comprises a multitude of signal portions in the frequency range.

b) Forms of separation

131 The claim is not limited to a specific form of separation as it can be either time dependent or time-frequency dependent, but can also encompass a gradual separation, see paras. [0060] ff.

132 According to para. [0060] one embodiment splits the input signal DMX into transient and non-transient components $s1$ and $s2$, respectively, independent of frequency for all signal portions with time index n , by applying a separation parameter $\beta[n]$. In this case the separation may be conducted as a “hard separation” as the Defendant refers to, where an input signal is separated into two components with one being zero as this form of frequency independent separation parameter may feed all subband signal portions with time index n either to the transient decorrelator 520 or into the second decorrelator depending on the value of $\beta[n]$:

$$s1[n] = DMX[n] \cdot \beta[n]$$

$$s2[n] = DMX[n] \cdot (1 - \beta[n])$$

In another embodiment the separation can be conducted based on frequency. Here, the transient separator 510 is adapted to separate an apparatus input signal based on a frequency dependent transient separation information and may process subband signal portions with the same time index differently, if their corresponding transient separation information differs, para. [0061]. Thus, this discloses a separation of signal portions within the same time index into different components based on their frequency.

133 According to para. [0064] the transient separation parameter $\beta[n]$ may be a binary parameter, where $\beta[n]$ may be either 1 (indicating that the considered signal portion shall be fed into the transient decorrelator) or 0 (indicating that the considered signal portion shall be fed into the second decorrelator). Restricting $\beta[n]$ to $\beta \in \{0, 1\}$ results in hard transient/non-transient decisions, i.e. components that are treated as transients are fully separated from the input ($\beta = 1$). However, as also this separation process refers to a matrix, it encompasses not a sequential classification but a true separation.

134 Finally, the patent also teaches a gradual separation based on time-frequency pairs:

[0037] In another embodiment, the transient separator is adapted to partially feed a considered signal portion of an apparatus input signal into the transient decorrelator and to partially feed the considered signal portion into the second decorrelator. The amount of the considered signal portion that is fed into the transient separator and the amount of the considered signal portion that is fed into the second decorrelator depend on transient separation information. By this, the strength of a transient may be taken into account.

[0065] In another embodiment, the transient separator 510 is adapted to partially feed a considered signal portion of the apparatus input signal into the transient decorrelator 520 and to partially feed the considered signal portion into the second decorrelator 530. The amount of the considered signal portion that is fed into the transient separator 520 and the amount of the considered signal portion that is fed into the second decorrelator 530 depends on transient separation information. In an embodiment, $\beta[n]$ has to be in the range $[0, 1]$. In a further embodiment, $\beta[n]$ may be restricted to $\beta[n] \in [0, \beta_{\max}]$, where $\beta_{\max} < 1$, results in a partial separation of the transients, leading to a less pronounced effect of the transient handling scheme. Therefore, changing $\beta_{\max}$ allows to fade between the output of the conventional upmix processing without transient handling and the upmix processing including the transient handling.

135 In the embodiment as described in para. [0065], several time-frequency pairs make up the input signal, which are gradually separated into two components, which are separately processed. Changing the parameter $\beta_{\max}$ allows to fade between the output of the conventional upmix processing without and the upmix processing including the transient handling. These components are then later combined again. This makes sense, as the skilled person is aware of the fact that typically a signal consists of several transitions between transients and non-transients over time so that there are time slots associated with non-transients following time slots associated with transients, and vice versa.

136 As a parameter $\beta_{\max} < 1$, results in a partial separation of the transients, leading to a less pronounced effect of the transient handling scheme, this shows that one of the two components of the input signal is not always zero. The patent consistently describes separate processing paths for transient and non-transient portions (fig. 4 to 7 and 9). The description consistently uses the term “fed... to decorrelator” (e.g., [0031, [0032] [0048]]), which is to be understood to mean true separation, i.e. that extended signals or components are individually processed, not just individual frames or even bins within the same signal. The claim language also supports this interpretation: Each signal component comprises signal portions (i.e. plural). This means that a component is more than a single sample, contrary to Defendants’ perspective on isolated bins or blocks (“per-n processing”).

c) Coherence with claim as a whole

137 This interpretation is coherent with the claim as a whole. Feature 1.4 requires that the combining unit is defined as combining the first decorrelated signal component and the

second decorrelated signal component to one output, i.e. to one decorrelated combination signal, as illustrated in figure 3. First, the input signal is separated into a non-transient and a transient component, each comprising non-transient and transient portions of the input signal, respectively, based on frequency-time pairs. Then, the separated signal components are separately decorrelated by two decorrelators applying different decorrelation methods to form the decorrelated signal components. Finally, the decorrelated signal components are combined back together to form the “wet” signal for the mixing as per feature groups 1.5 and 1.6.

138 This is addressed in para. [0067]:

[0067] A transient decorrelator 520 according to an embodiment creates an output signal that is sufficiently decorrelated to the input. It does not alter the temporal structure of single claps/transients (no temporal smearing, no delay). Instead, it leads to a spatial distribution of the transient signal components (after the upmix process), which is similar to the spatial distribution in the original (non-coded) signal. The transient decorrelator 520 may allow for bit rate vs. quality trade-offs (e.g., fully random spatial transient distribution at low bitrate ↔ close to the original (near-transparent) at high bit rate). Furthermore, this is achieved with low computational complexity.

139 The skilled person understands that time-dependent complementary elements are added back together after having been separated to be fed into different decorrelators. As conventional decorrelators smear the signal portions over time, para. [0024], the specific frequency-time pairs processed by the transient decorrelator have to be added back to the output of the allpass decorrelator signal in order to improve the sound perception.

4. Features 1.2 and 1.3

1.2 a transient decorrelator for decorrelating the first signal component according to a first decorrelation method to obtain a first decorrelated signal component;

1.3 a further second decorrelator for decorrelating the second signal component according to a second decorrelation method to obtain a second decorrelated signal component,

1.3.1 wherein the second decorrelation method is different from the first decorrelation method;

140 According to features 1.2 and 1.3, the decoder comprises two different decorrelators, a transient decorrelator and a second decorrelator applying different decorrelation methods for decorrelating the respective signal component, as illustrated in fig. 3 depicted above.

141 The transient decorrelator is adapted to decorrelate the signal component (s1) comprising transients. The transient decorrelator of feature 1.2 is not limited to any particular decorrelation method. An example of a transient decorrelation method is

described in para. [0047], which may be carried out by applying phase information, e.g., by applying phase terms. However, the claim wording is not limited to any specific decorrelation method in that respect.

142 Similarly, also the second decorrelator is not limited to a particular decorrelation method. As also evident from fig. 3, the second decorrelator is typically described as a conventional decorrelator, such as e.g., a lattice IIR decorrelator, para. [0043].

143 Feature 1.3.1 requires that two different decorrelation methods are being applied to the two components of the input signal, which is coherent with the teaching of the patent as a whole.

5. Feature group 1.4

1.4 a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal;

1.4.1 wherein the combining unit is adapted to combine the first decorrelated signal component and the second decorrelated signal component by adding the first decorrelated signal component and the second decorrelated signal component; and

144 Feature 1.4 defines the combining unit as combining the first decorrelated signal component and the second decorrelated signal component to one output, i.e. to one decorrelated combination signal.

145 How the two decorrelated signals are combined is not specified in claim 1 as granted, i.e. without considering feature 1.4.1. According to the patent specification, however, combining can be performed by adding the two signal components together, see e.g. paragraph [0049]:

[0049] After being decorrelated by the conventional decorrelator 330, the decorrelated signal component from the conventional decorrelator 330 is fed into the combining unit 340. The decorrelated transient signal component from the transient decorrelator 320 is also fed into the combining unit 340. The combining unit 340 then combines both decorrelated signal components, e.g. by adding both signal components, to obtain a decorrelated combination signal.

146 Combining these two signal components results in a so-called decorrelated combination signal. The decorrelated combination signal according to feature 1.4 is a combination of the first and second decorrelated signal component. This means, the decorrelated combination signal differs from the first/second decorrelated signal component.

147 In deviation from the claim as granted Claimant declared in the oral hearing to make Auxiliary Request I unconditional, thus introducing additional feature 1.4.1. (as also recited above):

1.4.1 wherein the combining unit is adapted to combine the first decorrelated signal component and the second decorrelated signal component by adding the

first decorrelated signal component and the second decorrelated signal component;

148 With this amendment the combination of the two signal components disclosed in feature 1.4 is limited to a combination by *addition*, which is in line with the embodiment disclosed in para. [0049] cited above.

6. Features 1.5 and 1.6

1.5 a mixer,

1.5.1 being adapted to receive mixer input signals and

1.5.2 being adapted to generate output signals based on the mixer input signals and a mixing rule;

1.6 wherein the combining unit and the mixer are arranged so

1.6.1 that the decorrelated combination signal is fed into the mixer as a first mixer input signal and

1.6.2 that the apparatus input signal or a signal derived from the apparatus input signal is fed into the mixer as a second mixer input signal.

149 According to feature 1.5 the decoder further comprises a mixer, which receives (mixer) input signals and generates output signals based on the mixer input signals and a mixing rule. Features 1.6.1 and 1.6.2 further specify said input signals to be the decorrelated combination signal output by the combining unit (as first input signal) and the original signal as received by the decoder, i.e. the encoded signal, or a signal derived from said encoded signal (as second input signal).

150 The skilled person understands from the patent that the mixer receives both a wet signal and a dry signal as inputs. This is because according to feature 1.6 the combining unit and the mixer are arranged so that the mixer is fed with the decorrelated combination signal and the apparatus input signal as a second mixer input signal. This requires that the decorrelated signal components – after having run through the two different types of decorrelators – are already combined and only the decorrelated combination signal is fed to the mixer together with the apparatus input signal, hence wet and dry signals. This is illustrated in fig. 4:

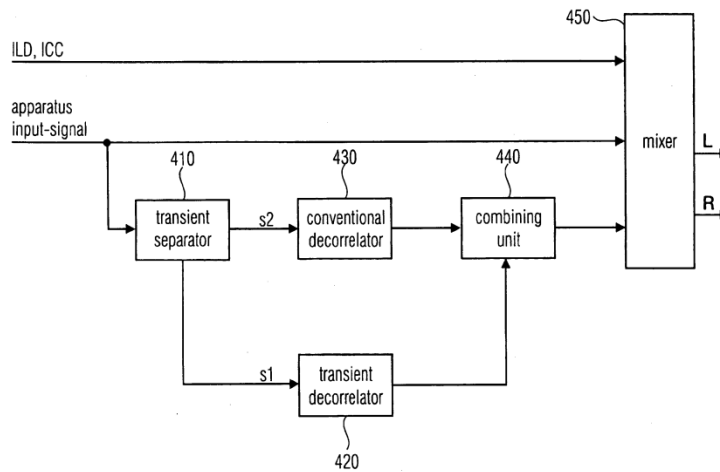


FIG 4

III. CLAIM CONSTRUCTION OF CLAIM 13

151 In deviation from method claim 13 as granted Claimant declared in the oral hearing to make Auxiliary Request I unconditional, thus independent claim 13 becomes claim 12. Auxiliary Request I similarly introduces as additional feature the following:

13.4.1. by adding the first decorrelated signal component and the second decorrelated signal component.

152 The interpretation laid out above applies correspondingly to the amended method claim.

F. VALIDITY

153 The patent is valid with the claims according to Auxiliary Request I, which Claimant made unconditional in the oral hearing. Against these claims, Defendant's priority attack with respect to HLCC 4 is unsuccessful. As a consequence, HLCC 7 is no prior art for claims 1 and 13 (now 12) and these claims are considered novel absent any other novelty attacks of the Defendant. The claims are also considered inventive in light of Defendant's attack based on HLCC 8 (MPEG Surround) in combination with HLCC 9.

I. PRIORITY

154 Claims 1 and 13 (now 12) in the wording of Auxiliary Request I validly claim priority of US application US 61/376,980 (US 376980 P) filed on 25 August 2010 (Exhibit HLCC 4).

1. Principles

155 In accordance with Art. 87 EPC a European patent application is only entitled to priority in respect of 'the same invention' as was disclosed in the previous application.

156 Under Article 87 EPC, any person who has duly filed an application for a patent, a utility model or a utility model certificate, or their successor in title, is entitled to a right of priority for the application for the same invention to a European patent within a period of twelve months from the filing date of the first application. This right may be claimed in accordance with Article 88 EPC. The priority right has the effect that the priority date is deemed to be the filing date of the European patent application for the purposes of

determining the state of the art (Article 89 in conjunction with Article 54(2) and (3) EPC). The term ‘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 the invention in an earlier application if the person skilled in the art can derive the subject-matter of the claim, using general technical knowledge, directly and unambiguously from the earlier application as a whole (LD Hamburg, decision of 5 November 2025 – UPC_CFI_461/2024 – Dolle v Fakro, mn. 114; CD Munich, UPC_CFI_1/2023, decision of 16 July 2024).

157 According to the CoA the test to be applied in this respect is the same as the disclosure test regarding added matter under Art. 123(2) EPC (CoA, decision of 2 June 2026 – UPC_CoA_312/2025 - Fujifilm v Kodak, mn. 97). Hence, the decisive factor is what the person skilled in the art, draws directly and unambiguously from the entire application filed, using their general technical knowledge and viewed objectively at the time of filing, whereby an implicitly disclosed subject-matter, i.e. a subject-matter that follows clearly and unambiguously from what is expressly mentioned, is also to be regarded as part of the content (LD Düsseldorf, UPC_CFI_115/2024, decision of 15 October 2025).

2. Application to the present case

158 In the wording of Auxiliary Request I claims 1 and 13 (now 12) can validly claim priority of US 61/376,980 P (Exhibit HLCC 4), which is why any discussions whether features 1.4 and 13.4 are broader than disclosed in the priority document, are irrelevant.

159 HLCC 4 also supports a valid priority in view of the remaining features. Contrary to Defendant’s assertion, the priority document does disclose a *mixer* as defined by feature 1.5 in combination with any one of features 1.5.2 and feature 1.6.1.

160 Feature 1.5.2 stipulates that output signals are generated based on the mixer input signals and a mixing rule, that is, based on an arbitrary mixing rule. Page 8 of HLCC 4 depicts the application of an up-mix matrix as general background:

Spatial audio coding schemes:

Parametric Stereo (PS) [1]:

Figure 1 shows the structure of the mono-to-stereo decoder. From the mono input signal M (“dry” signal) a single decorrelator generates a de-correlated signal D (“wet” signal) that is fed into the matrixing stage along with signal M. Inside the up-mix matrix the L and R output is formed according to a mixing matrix H. The coefficients in the matrix H can be fixed, signal dependent or controlled by the user.

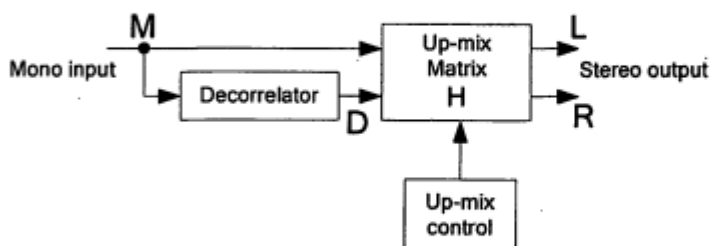


Figure 1: Typical application of a decorrelator in a mono to stereo up-mixer.

Alternatively, the matrix is controlled by side information that is transmitted along with the down-mix and contains the parametric description on how to up-mix the signals of the down-mix to form the desired multi-channel output. This spatial side information is usually generated during the mono downmix process in an accordant signal encoder.

161 The up-mix matrix H shows stereo output with left and right signals. The skilled person is instructed to apply “existing upmix systems”, as disclosed in connection with figure 3 in HLCC 4 (p. 13):

Figure 3 depicts an overview of the proposed transient handling approach in an 1-to-2 upmix system like a one-to-two (OTT) box of an MPS spatial audio decoder. The proposed parallel signal

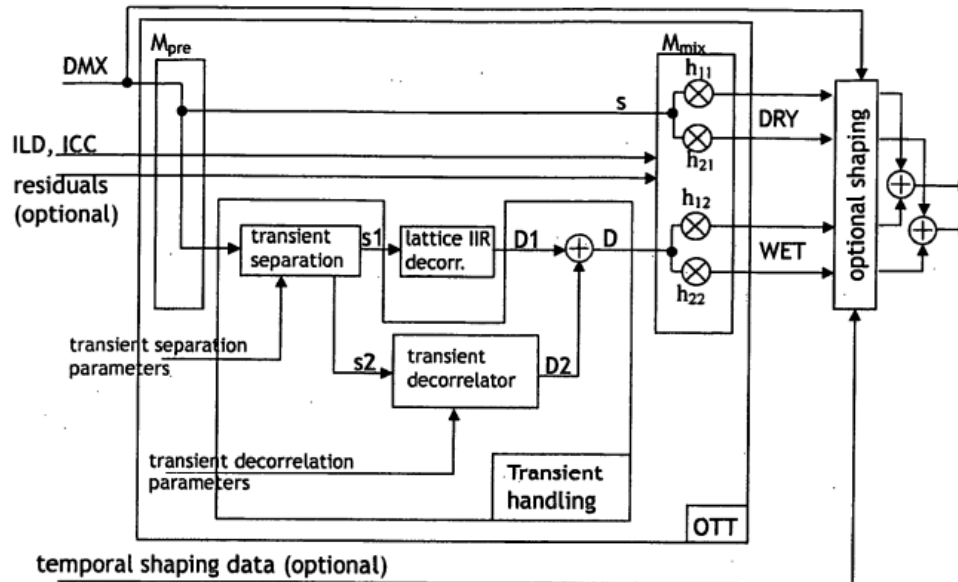


Figure 3: 1-to-2 (OTT) system overview including proposed transient handling

path for the separated transients is highlighted by gray shading in Figure 3. The processing principles shown in this figure may be applied in mono-to-stereo upmix systems (e.g. stereo audio coders) as well as for multi-channel setups (e.g. MPEG Surround). The proposed transient handling scheme can be applied as an upgrade to existing upmix systems without large conceptual changes of the upmix system, since only a parallel decorrelator signal path is introduced without altering the upmix process itself.

162 The skilled person directly and unambiguously learns that the “transient handling scheme” as per the priority document can be applied as an upgrade to existing upmix system without large conceptual changes of the upmix system. This means, the “transient handling scheme” can effectively be combined with any mixer applying any “mixing rule”, and in particular with mixers as used in “Parametric Stereo (PS)” or “MPEG Surround (MPS)”.

163 Thus, features 1.5 and 1.6.1 have sufficient basis in HLCC 4, and the priority is valid in view of these features, hence the patent in suit validly claims priority dated 25 August 2010.

II. VALIDITY OVER HLCC 7 (DRAFT VERSION OF USAC)

164 As the patent in suit can rightfully claim a priority of 25 August 2010 based on HLCC 4, the ISO working document HLCC 7 is not prior art for the claims per Auxiliary Request I in the first place. It is therefore irrelevant whether the subject-matter of the independent claims is disclosed in HLCC 7 or not.

165 The document N12013 (Exhibit HLCC 7) is a draft version of the USAC standard filed and published as a contribution to ISO/IEC JTC 1/SC 29/WG 11. HLCC 7 has been uploaded to the MPEG-database [<https://dms.mpeg.expert/>] on 22 April 2011.

166 This upload date is after the priority date. Thus, in view of the valid priority, the highly disputed question, whether such ISO working documents are to be considered accessible to a rather broadly defined group and – as a consequence – can establish prior art, does not need to be decided.

167 As a result, the claims per Auxiliary Request I are considered to be novel.

III. INVENTIVE STEP BASED ON HLCC 8 WITH HLCC 9

1. Standard

168 The CoA has already established the principles on the approach taken to examine inventive step in the cases UPC_CoA_528/2024 and UPC_CoA_529/2024 (25 November 2025, Amgen v Sanofi/Regeneron, see also UPC_CoA_646/2024, 25 November 2025, Meril v Edwards), and confirmed this approach in case UPC_CoA_901/2025 (17 April 2026 – Abbott Diabetes Care v Sinocare, mn. 90 ff.). According to this, in a first step the object of the invention (the objective problem) must be established. This must be assessed from the perspective of the skilled person with its common general knowledge at the application or priority date of the patent. In this assessment, it should be established what the invention adds to the state of the art, not by looking at the individual features of the claim, but by comparing the claim as a whole in the context of the description and the drawings, thus also considering the inventive concept underlying the invention (the technical teaching), which must be based on the technical effect(s) that the skilled person on the basis of the patent understands is (are) achieved with the claimed invention. The claimed solution is obvious when at the relevant date, the skilled person, starting from a realistic starting point in the state of the art in the relevant field of technology, wishing to solve the objective problem, would (and not only: could) have arrived at the claimed solution (UPC_CoA_901/2025, 17 April 2026 – Abbott Diabetes Care v Sinocare, mn. 91).

169 A starting point is realistic if the teaching thereof would have been of interest to a skilled person who, at the relevant date, wishes to solve the objective problem. This may for instance be the case if the relevant piece of prior art already discloses several features similar to those relevant to the invention as claimed and/or addresses the same or a similar underlying problem as that of the claimed invention. There can be more than one realistic starting point and the claimed invention must be inventive starting from each of them (UPC_CoA_901/2025, 17 April 2026 – Abbott Diabetes Care v Sinocare, mn. 92).

2. Present case

170 The parties rightfully agree that HLCC 8 can be a realistic starting point for the skilled person in order to solve the objective problem. That is because HLCC 8 describes the MPEG Surround standard ISO/IEC 23003-1:2007(E), which is the basis for the technology addressed by the patent in suit. HLCC 8 was published on 15 February 2007 i.e., before the priority date of the patent. The patent in suit explicitly refers to the “MPEG Surround”

when describing the background of the invention, in particular for state of the art spatial audio decoders.

- 171 HLCC 8 undisputedly fails to disclose the decorrelator function specified in the patent. As Defendant correctly acknowledged, it fails to disclose in particular features 1.1 to 1.4 directed to the transient separator, using different decorrelation methods for transient and non-transient signal portions, and a combination of the different decorrelated signal paths, as HLCC 8 does not disclose a signal decoding path including the transient separator.
- 172 HLCC 8 only discloses a common decorrelator for the entire input signal. It does not disclose a separation of transient and non-transient signal portions and processing using two different decorrelators to obtain two different decorrelated signal components. HLCC 9 on the other hand, does not disclose the latter, either.
- 173 HLCC 9 refers to a “Randomized Amplitude Scale Factor” and a “Rotate Angle” in para. [0047] and [0048]. HLCC 9 was already considered in the examination procedure at the EPO, where it was considered closest prior art. HLCC 9 suggests dividing the input signals into smaller frames and blocks and applying a different decorrelator to each block as a whole depending on whether the block is a transient or non-transient signal component. However, it suggests that in each “channel audio recovery path” (22, 24) of the “decoding arrangement”, the entirety of the “apparatus input signal” (i.e., the “recovered mono composite audio”) passes through the exact same modules, i.e., the “Adjust Amplitude” (26, 32), “Rotate Angle” (28, 34), and, if applicable, the “Inverse Filterbank” (30, 36) modules of the respective “channel audio recovery path”. Any and all signal portions of the “apparatus input signal” take this exact same “channel audio recovery path”, irrespective of whether they are “transient signal portions” or “non-transient signal portions”. The only difference made between “transient signal portions” and “non-transient signal portions” is the “mode of randomized angle decorrelation”.
- 174 HLCC 9 does, however, not teach two separate decorrelators and – as a consequence – no “combining unit” and a “mixer” as per feature group 1.6 as it does not need it. Inventiveness is also not put into question with respect to HLCC 8 disclosing a mixing unit after the decorrelator as the mixing is not based on the addition of two different decorrelation processes.
- 175 Furthermore, the teaching of HLCC 9 even leads the skilled person away from the solution claimed by the patent in suit. That is because HLCC 9 contemplates that the handling of transients in decoding can be improved by providing a single decorrelator with “multiple modes of operation, depending on whether or not a transient is present” (HLCC 9, para. [0059]). In substance, HLCC 9 proposes a different solution to the problem of transient handling in decoding than the patent does, and as such leads the skilled person away from the latter.

IV. AUXILIARY REQUESTS

176 As already laid out above, the patent in suit is valid in the wording of Auxiliary Request I. As the conditions to examine the other auxiliary requests under R. 30.1 lit. c) and 30.2 RoP are not met, no discussion of their subject is necessary.

G. INFRINGEMENT

177 The attacked embodiments infringe claim 1 and 12 of the patent in the wording of Auxiliary Request I.

I. ATTACKED EMBODIMENTS

178 Claimant directs this action against all devices, in particular smartphones and tablets, that use Android OS version 9 or later and that are manufactured and/or marketed by the defendant under the Nokia and/or HMD brand, for example, but not limited to, HMD smartphones such as the 'HMD Pulse' or 'HMD Arc', the HMD tablet 'HMD T21', as well as Nokia smartphones such as the 'Nokia C32', 'Nokia G22' and Nokia tablets such as the 'Nokia T20', etc.

II. THE USAC STANDARD

179 The patent in suit is assessed in view of the MPEG-4 Part 3 – Audio standard, as published under ISO/IEC 14496-3. Part of this standard is the family of AAC technologies ('Advanced Audio Coding', also known as the 'AAC standard'), which describes the encoding and compression of digital audio data. The most recent of these technologies is the so-called USAC standard ('Unified Speech and Audio Codec', also known as xHE-AAC or 'Extended HE-AAC'). In accordance with Section 1.5.1.2.40 of the MPEG-4 Audio Standard, Amendment 3, the USAC object type carries the 'Unified Speech and Audio Coding payload (see ISO/IEC 23003-3)' within the MPEG-4 audio framework. Since the third amendment, the USAC standard (ISO/IEC 23003-3:2012, Exhibit BP-T 5) has therefore been an integral part of the MPEG-4 standards, and support for the USAC object type is a normative requirement.

180 MPEG Surround is an indispensable part of USAC, wherein the possibility that the output decoder can be processed further by MPEG Surround is not merely optional but a true capability that must be supported by devices that support the standard.

III. CLAIM 1

181 Infringement of claim 1 in the wording of Auxiliary Request I follows the finding that Android OS version 9 necessarily requires AAC and in particular the USAC standard. As the USAC is part of MPEG-4 Part 3 - Audio, as published under ISO/IEC 14496-3, it is making use of claim 1 of the patent in suit. That the *Transient steering decorrelator* (TSD) can either be activated or not does not render either part of the standard to be optional. Both cases need to be supported by a device if it claims to support the respective standard.

a) Feature group 1

182 The USAC incorporated in Android OS version 9 (or higher) and thus the attacked embodiments as far as they use Android OS version 9 (or higher) necessarily make use of feature group 1.

1. *An apparatus for decoding a signal comprising:*

1.1 *a transient separator for separating an apparatus input signal into a first signal component and into a second signal component*

1.1.1 *such that the first signal component comprises transient signal portions of the input signal and*

1.1.2 *such that the second signal component comprises non-transient signal portions of the input signal;*

183 As discussed above, feature group 1.1 defines a transient separator that is intended to separate a received apparatus *input signal* into two *signal components*, i.e. a transient portion of the input signal and a non-transient portion of the input signal. In other words, the transient separator according to claim 1 is configured to separate the apparatus input signal into a first signal component and into a second signal component as per features 1.1.1 and 1.1.2, respectively.

184 The mono to stereo upmixing is described in section 7.11 of the USAC standard (page 167 Exhibit BP-T 5). A basic element of MPEG Surround coding is the OTT box (“one-to-two”), which performs exactly the required mono to stereo upmixing on the decoder side as shown in Figure 20. Figure 20 shows that a mono signal (“M0”) is fed into, among other things, a “mix matrix [M2]”. The mix-matrix M2 uses the parameters CLD, ICC and IPD for upmixing. The mix-matrix M2 upmixes the mono signal and outputs two signals: “Left” and “Right”:

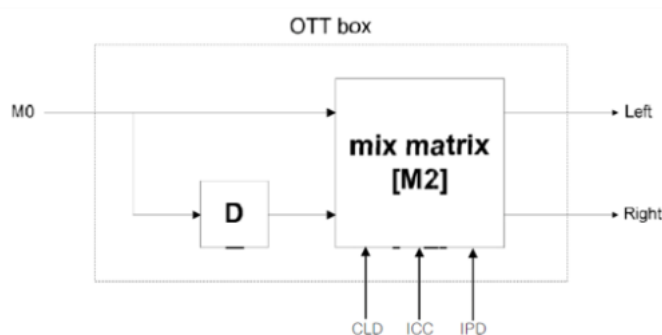


Figure 20 — OTT decoding block: two output signals with the correct spatial cues are generated by mixing a mono input signal M0 with the output of a decorrelator D that is fed with that mono input signal

185 Section 7.11.2.3.1 of the USAC standard describes that the calculation of the mix-matrix M2 is done according to section 6.5 of the MPS standard, but with the modifications described in section 7.11.2.3.2 of the USAC standard. If IPD parameters are available, the

mix-matrix M2 is modified for phase synthesis (page 172, Exhibit BP-T 5). Figure 20 depicted above corresponds conceptually to figure 1 of the patent in suit.

186 Section 7.11.2.4 then describes that transient separation is conducted in the time-frequency domain based on the input signal time-frequency pairs $v_X^{n,k}$. The decorrelator block D in the OTT decoding block (Figure 20) consists of a signal separator, two decorrelator structures, and a signal combiner as shown in Figure 22:

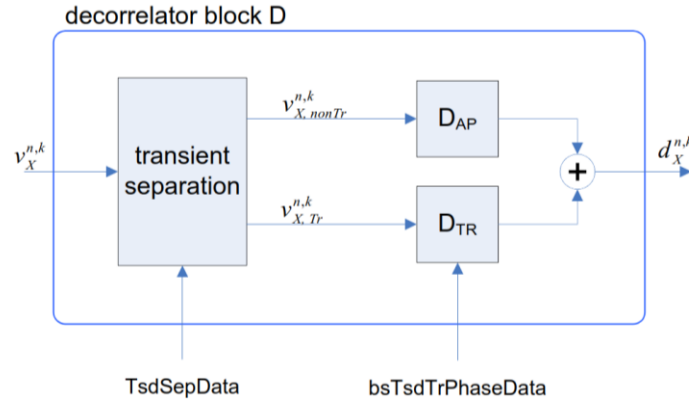


Figure 22 — Transient steering decorrelator block D

187 The decorrelation block as shown in Fig. 22, uses a so-called Quadrature Mirror Filter (QMF) representation of the input signal, commonly used in the pertinent technical field, which is based in the MPEG Surround standard (Exhibit HL 2: “Decorrelators [...] are implemented [...] in the QMF subband domain”).

188 $v_X^{n,k}$ is a scalar value representing the input signal $M0$ in the QMF domain at the n -th slot and in the k -th subband (see Exhibit HL 2, sec. 3.1.8, 3.1.20, 3.1.21, 3.1.25, 3.5, 6.2.2). This means, $v_X^{n,k}$ represents the n -th and k -th time-frequency pair of the input signal $M0$ in the QMF domain, with the first signal component formed by a transient stream $v_{X,Tr}^{n,k}$ and the second signal component formed by a non-transient stream $v_{X,nonTr}^{n,k}$. This implies that the actual input signal $M0$ comprises the entirety of all time-frequency pairs (signal portions) $v_X^{n,k}$ for all possible values of n and k . This implies that not only a single time-frequency pair is input into the decorrelator block as per Fig. 22 of the standard, but all time-frequency pairs for all possible values of n and k are input.

189 If the TSD tool is active in the current frame, i.e. if $(bsTsdEnable==1)$, the input signal is separated into the transient stream $v_{X,Tr}^{n,k}$ and the non-transient stream $v_{X,nonTr}^{n,k}$ according to the following matrix:

$$v_{X,Tr}^{n,k} = \begin{cases} v_X^{n,k} & , \text{ if } TsdSepData(n) = 1, 7 \leq k \\ 0 & , \text{ otherwise} \end{cases}$$

$$v_{X,nonTr}^{n,k} = \begin{cases} 0 & , \text{ if } TsdSepData(n) = 1, 7 \leq k \\ v_X^{n,k} & , \text{ otherwise} \end{cases}$$

190 Contrary to the Defendant, in the USAC standard the input signal $v_X^{n,k}$ is separated over multiple samples n, k , i.e. forming true separate “streams”, wherein this separation goes beyond a mere non-separative assignment of individual samples to either the transient stream or the non-transient stream, like in the prior art (see HLCC 9) based on a Transient Flag. While for a respective $v_X^{n,k}$ the corresponding sample for one of the streams is set to zero this does not mean that in the USAC standard one of the streams is always zero over multiple samples. Thus, two distinct separate streams are formed according to feature group 1.1, which is thus realized in the USAC standard.

b) Feature 1.2 and feature group 1.3

1.2 a transient decorrelator for decorrelating the first signal component according to a first decorrelation method to obtain a first decorrelated signal component;

1.3 a further second decorrelator for decorrelating the second signal component according to a second decorrelation method to obtain a second decorrelated signal component,

1.3.1 wherein the second decorrelation method is different from the first decorrelation method;

191 Based on the foregoing, the USAC Standard does apply two different decorrelators to the transient stream $v_{X,Tr}^{n,k}$ and the non-transient stream $v_{X,nonTr}^{n,k}$. Decorrelation methods are applied to each time-frequency sample of the separated input signal $M0$ in the QMF domain depending on the time-dependent transient separation data $TsdSepData(n)$ and the value of k of the specific frequency subband. Then different decorrelation methods are applied to different signal components of the input signal $M0$:

192 The first signal component – i.e., frequency subbands $v_X^{n,7} = v_{X,Tr}^{n,7}$, $v_X^{n,8} = v_{X,Tr}^{n,8}$, etc. for all n where $TsdSepData(n) = 1$ – are decorrelated by a transient decorrelator according to a first decorrelation method to obtain a first decorrelated signal component $d_{X,Tr}^{n,k}$ which is also time-frequency dependent.

193 The second signal component – i.e., frequency subbands $v_X^{n,0} = v_{X,nonTr}^{n,0}$ through $v_X^{n,6} = v_{X,nonTr}^{n,6}$ for all n where $TsdSepData(n) = 1$, and all frequency subbands for all n where $TsdSepData(n) = 0$ – are decorrelated by a further second decorrelator according to a second decorrelation method to obtain a second decorrelated signal component $d_{X,nonTr}^{n,k}$.

194 The second decorrelation method is different from the first decorrelation method. The decorrelated signal component can have a different time structure compared to their input counterparts. This means that even if the non-transient signal component $v_{X,nonTr}^{n,k}$

is zero for a given (n,k) -pair, it does not follow that also the non-transient decorrelated signal component $d_{X,nonTr}^{n,k}$ is zero for the same (n,k) -pair.

- 195 The USAC Standard uses a frequency-dependent pre-delay followed by all-pass (IIR) sections, i.e., an all-pass decorrelator as the second decorrelation method for the non-transient stream (cf. Exhibit BP-T 5, Sec. 7.11.2.4 and 7.11.2.5):

The non-transient signal components are processed in all-pass decorrelator D_{AP} as defined in the next subsection, yielding the decorrelator output for non-transient signal components,

$$d_{X,nonTr}^{n,k} = \mathbf{D}_{AP} \{v_{X,nonTr}^{n,k}\}.$$

- 196 The non-transient decorrelated signal $d_{X,nonTr}^{n,k}$ forms the second decorrelated signal component, which is obtained by using an all-pass-decorrelator:

7.11.2.5 All-Pass Decorrelator

As described in ISO/IEC 23003-1:2007, 6.6, the de-correlation filters consist of a frequency-dependent pre-delay followed by all-pass (IIR) sections.

- 197 In contrast, the transient stream (first signal component) is processed in a transient decorrelator structure DTR according to section 7.11.2.4 of the USAC Standard:

If the TSD tool is disabled in the current frame, i.e. if $(bsTsdEnable==0)$, the input signal is processed as if $TsdSepData(n)=0$ for all n .

Transient signal components are processed in a transient decorrelator structure D_{TR} as follows:

$$d_{X,Tr}^{n,k} = \begin{cases} e^{j\varphi_{TSD}^n} \cdot v_{X,Tr}^{n,k} & , \text{ if } bsTsdEnable = 1 \\ 0 & , \text{ otherwise} \end{cases},$$

where

$$\varphi_{TSD}^n = \pi \cdot 0.25 \cdot bsTsdTrPhaseData(n).$$

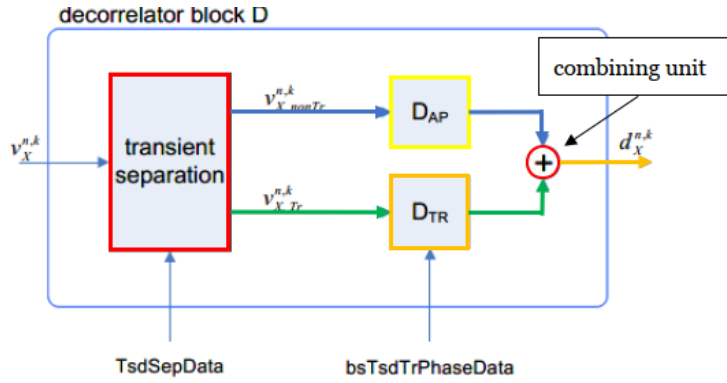
- 198 Hence, feature 1.2 and feature group 1.3 are realized in the USAC Standard.

c) Feature group 1.4

1.4 a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal; and

1.4.1 the combining unit is adapted to combine the first decorrelated signal component and the second decorrelated signal component by adding the first decorrelated signal component and the second decorrelated signal component.

- 199 USAC Standard prescribes a combining unit for combining the output of the transient decorrelator, i.e., the first decorrelated signal component, and the output of the further second decorrelator, i.e., the second decorrelated signal component, to obtain a decorrelated combination signal in its Fig. 22 (here coloured):



200 USAC Standard, item 7.11.2.4, last paragraph, provides the formula how the decorrelator outputs are added to form the decorrelated signal containing both transient and non-transient components (exhibit BP-T 5, p. 177):

$$d_X^{n,k} = d_{X,Tr}^{n,k} + d_{X,nonTr}^{n,k} .$$

201 Fig. 22 USAC shows the recombination with regard to a given (n,k)-pair. It is undisputed that this recombination is applied to every (n,k)-pair. However, contrary to the Defendant's assumption, as the output of the non-transient, allpass decorrelator DAP can be non-zero even where $v_{X,nonTr}^{n,k} = 0$ it is necessary to add the (first) decorrelated transient signal component and the (second) decorrelated non-transient signal component. As the addition of two non-zero components does alter the original decorrelated input signal, it cannot be described as a mere forwarding of the decorrelated signal component that is received as input. According to the USAC Standard two non-zero components (consisting of multiple frequency-time samples as signal portions) are added back together. Thus, also feature group 1.4 is realized in the USAC standard.

d) Feature group 1.5

1.5 a mixer,

1.5.1 being adapted to receive mixer input signals and

1.5.2 being adapted to generate output signals based on the mixer input signals and a mixing rule;

202 The realisation of this feature group is rightfully not disputed. The application of a mix matrix, representing a mixing rule of a mixer, is shown in figure 20 of the USAC, depicted above.

e) Feature group 1.6

1.6 wherein the combining unit and the mixer are arranged so that

1.6.1 the decorrelated combination signal is fed into the mixer as a first mixer input signal and

1.6.2 that the apparatus input signal or a signal derived from the apparatus input signal is fed into the mixer as a second mixer input signal.

203 In view of figures 20 and 22 depicted above, it is clear that the output of the decorrelator block D forms a decorrelated combination signal as a first mixer input signal, while the original undecorrelated signal M0 forms the apparatus input signal as a second mixer input signal. The mixer input signals represent the wet and the dry signal for mixing and generating output signals. Thus, feature group 1.6 is also realized in the USAC standard.

IV. CLAIM 13 (NOW 12)

204 The attacked embodiments also apply a method according to claim 12 in the wording of Auxiliary Request I. Given the corresponding scope of claim 12 compared to claim 1, the features of claim 12 are also considered to be realized in the USAC standard. For the avoidance of repetition reference is made to the discussion above.

H. EXHAUSTION DEFENCE

205 Claimant's patent rights are not subject to exhaustion. Defendant's argumentation is without merit as neither the Operating System Android nor the FDK Codec is a licensed product under the Patent License Agreement between Via and Google (see below under I.). The bilateral license agreement between Google LLC and the Claimant does not include patent rights in the first place and thus cannot lead to exhaustion (see below under II.)

! [REDACTED]

206 The [REDACTED] does neither cover third party products as the Defendant's nor is the Operation System Android nor the FDK Codes itself a [REDACTED] under this agreement.

1. Legal background

207 According to Art. 29 UPCA shall the rights conferred by a European patent not extend to acts concerning a product covered by that patent after that product has been placed on the market in the European Union by, or with the consent of, the patent proprietor, unless there are legitimate grounds for the patent proprietor to oppose further commercialisation of the product. Consequently, where these conditions are met, the right conferred on the patent proprietor by the patent is limited to the territory of the Community. The lawful acquirer of a product placed on the market by the patent holder or with the patent holder's consent is entitled to use it for its intended purpose, to sell it to third parties or to offer it to third parties for one of these purposes (LD Düsseldorf, decision of 22 June 2026 – UPC_CFI_811/2024 - Evac v Shanghai VacDrain, mn. 159). As the principle of exhaustion is expressly regulated in Article 29 of the UPCA, there is no need to have recourse to the national law of the Member States (LD Munich, decision of 22 August 2025 – UPC_CFI_248/2024 - Brita v Aquashield, mn. 223 f.).

208 The effects of exhaustion initially extend to claims relating to devices. However, according to the wording (“acts relating to a product protected by the patent”), the effects of exhaustion also extend to method claims relating to the handling of a product protected by the patent. This applies both to a product which has been obtained directly through an authorised use of the patented process, and to a product which utilises a process claim, provided that it is also protected by an apparatus claim and has been placed on the market with the consent of the patent holder. Exceptions apply in cases where the patent holder has expressly reserved the right to consent to the use of this process. The patent holder may commercialise his exclusive right only once; subsequent uses of the patent are therefore, in principle, deemed to have been remunerated, unless otherwise agreed. In any event, this is the result where the patent holder has explicitly consented to such acts of use (LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 119 f.).

209 The question of whether consent has been given, in so far as it has been declared within the framework of a contract, is governed by the law applicable to the contract. However, the legal consequences of consent given by the patent proprietor arise from the law of the relevant country of protection — in this case, therefore, from Article 29 UPCA. In order to preserve the marketability of the products concerned, these legal consequences are, in principle, not subject to the principle of party disposition (LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 120).

2. Factual basis

210 [REDACTED]
[REDACTED] It is undisputed that there is a patent licence agreement concluded between [REDACTED] (Exhibit BP 12). The Patent-in-Suit is subject to the license Via has granted to [REDACTED]

211 In its preamble it is stated:

212 [REDACTED]

[REDACTED]

213

[REDACTED]

214

2.3.

[REDACTED]

2.1.

3. Assessment

215 Regardless of the fact, that the applicable law of the contract – both parties reside in the State of Delaware – is not disclosed, the legal consequences of consent given by the

patent proprietor arise from the law of the relevant country of protection, which is Art. 29 UPCA. Despite the fact, that the effects of exhaustion under Art. 29 UPCA also extend to method claims relating to the handling of a product protected by the patent, the scope of this agreement does not extend to Defendant's products and their use of the method protected by the patent.

216 In its preamble it is already stated, that only [REDACTED] products are subject to the license agreement, as it reads: "[REDACTED]"

[REDACTED] This gives an indication that the agreement's scope is limited to [REDACTED], as Claimant asserted.

217 According to section 1.2 and 2.1 the subjective scope of the agreement further is limited to [REDACTED] which Defendant undoubtedly is not, [REDACTED]

In addition, [REDACTED]

[REDACTED] hence Defendant cannot claim that Claimant had consented to a subsequent use of the patent by Defendant.

218 The same is demonstrated by [REDACTED] own disclaimer on its website. The NOTICE file for the Fraunhofer FDK AAC Codec as hosted on [REDACTED] own website states:

"Patent licenses for necessary patent claims for the FDK AAC Codec (including those of Fraunhofer) may be obtained through Via Licensing (www.vialicensing.com) or through the respective patent owners individually for the purpose of encoding or decoding bit streams in products that are compliant with the ISO/IEC MPEG audio standards. Please note that most manufacturers of [REDACTED] devices already license these patent claims through Via Licensing or directly from the patent owners, and therefore FDK AAC Codec software may already be covered under those patent licenses when it is used for those licensed purposes only."

219 This disclaimer shows [REDACTED] own understanding of the license agreement it signed with Via, that patent licenses still have to be obtained, which would be entirely unnecessary if [REDACTED] license had already exhausted the patent rights for all downstream uses – which is excluded by the agreement anyhow.

b) [REDACTED]

220 When it comes to Defendant's position that the [REDACTED] itself would be a [REDACTED], this argument is not convincing, either. [REDACTED] tries to derive rights from the fact that Fraunhofer "delivers" the [REDACTED] to [REDACTED] and [REDACTED] "delivers" [REDACTED] to smartphone manufacturers. Apart from the fact, that [REDACTED] is obviously no beneficiary of the license agreement, neither [REDACTED] th [REDACTED] h [REDACTED] considered a "[REDACTED]" according to [REDACTED]

221 Furthermore, [REDACTED] is no [REDACTED] in this sense as it requires downloading and installing and adjustment to the specifics of the device that necessarily precedes the creation of a [REDACTED]. Unlike consumer applications that are designed for immediate installation and use by any end user without technical expertise, [REDACTED] before it can function on a device.

222 While the parties agree that the Fraunhofer FDK AAC Codec, by its very nature a software library, is the [REDACTED]
[REDACTED] Here, it is even more evident that the FDK Codec, that is only one of many parts of the Android OS, never represents a ready to use end-user product as it requires integration by a software developer into the Operation System, first. A software library that requires compilation, integration into an operating system, and subsequent installation on hardware before any end user can interact with it, is not an [REDACTED] regardless of its degree of completion. Defendant acquires the Codec as part of [REDACTED] for the express purpose of integrating it into devices that it then sells. This is the opposite of what the “End User” definition requires. The Codec is just one component.

223 Accordingly, Claimant provided sufficient evidence in Exhibit BP 16 (Witness statement H. Jay) that [REDACTED]
[REDACTED]. The marketing statements by [REDACTED] or even by Claimant do obviously not refer to the confidential agreement and the terms and definitions used therein.

II. BILATERAL LICENSE AGREEMENT BETWEEN [REDACTED]

224 Defendant’s assertion that exhaustion may also result from the bilateral license agreement between the Claimant and [REDACTED] is without merit, as well. The agreement in question is explicitly [REDACTED]
[REDACTED]. If the agreement does not relate to patents, no exhaustion can be inferred from it. No evidence to the contrary can be found in the agreement. All assertions by the Defendant to the contrary are without any basis.

J. FRAND DEFENCE

225 Defendant’s FRAND defence is unsuccessful. It can be assumed, in favour of the Defendant, that the contested patent is standard-essential for the AAC standard, thus leading to a dominant market position of Claimant (see below under I.). Under European Competition Law the patent holder can, in principle, fulfil its obligations by either offering a pool license or a bilateral license. However, there are constellations where the implementer can demand a bilateral licence instead of a pool licence (see below II.). The

Defendant has not proven that such a constellation is given in the present case (see below III.). In addition, Defendant has not demonstrated to be continuously willing to obtain a bilateral licence never coming into possession of sufficient bilateral agreements with the other SEP pool licensors, and despite of that refrained from placing a security for Claimant's potential licence claims.

I. DOMINANT MARKET POSITION

226 According to Art. 20 UPCA the Unified Patent Court applies EU law in its entirety and respects its primacy. EU law is the primary source of law to be applied by the Unified Patent Court, Article 24(1)(a) UPCA. This includes the Treaty on the Functioning of the European Union (TFEU). The decisions of the Court of Justice of the European Union are binding on the Unified Patent Court, Article 21, second sentence, UPCA.

227 Art. 102(1) TFEU prohibits the abuse of a dominant position in the internal market or in a substantial part thereof by one or more companies, insofar as this may affect trade between Member States.

228 As laid out by the ECJ and several Local Divisions of the UPC a dominant position within the meaning of Art. 102 TFEU relates to a position of economic strength which enables a company to prevent the maintenance of effective competition in the relevant market, by giving it the power to behave to an appreciable extent independently of its competitors and customers (ECJ, judgment of 19 April 2012, C-549/10 P, ECLI:EU:C:2012:221, para. 38 - Tomra; see also: LD Munich, UPC_CFI_2/2023, decision of September 19, 2023, p. 93 - 10x Genomics vs. NanoString; LD Düsseldorf, UPC_CFI_135/2024, decision of 18 March 2026, paras. 458 et. seqq. - Dolby vs. Beko; LD Mannheim, Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 207 ff.). The relevant market must first be defined in terms of product scope and geographic scope before it can be determined whether a company holds a dominant position in that market (cf. LD Munich, UPC_CFI_2/2023, decision of September 19, 2023, p. 93 et seq. - 10x Genomics vs. NanoString). The definition of a relevant product market generally follows the demand-side market concept, i.e. assessing the substitutability of products from the perspective of the customer. Accordingly, the relevant product market comprises all products or services that, due to their characteristics, are particularly suited to satisfying a consistent demand and are only to a limited extent interchangeable with other products or services (cf. ECJ, judgment of 26 November 1998, C-7/97, ECLI:EU:C:1998:569, para. 33 - Oscar Bronner). The relevant geographic market comprises the area in which the concerned companies are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogenous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas (cf. Commission Notice on the definition of the relevant market for the purposes of Union competition law (C/2024/1645), para. 38).

229 In the present case it can be assumed, in favour of the Defendant, that the contested patent is standard-essential for the AAC standard. The Claimant has not disputed this

assumption and referred to the fact that at least one patent from each patent family licensed through the Via AAC patent pool has been classified by independent experts as ‘essential’ to the AAC standard.

II. PRINCIPLES

230 In the case Huawei/ZTE the ECJ established a framework for licence negotiations that is binding on the courts of the Member States.

1. Interplay of reciprocal obligations under the Huawei/ZTE framework

231 The Local Division Hamburg agrees with the general classification of the programme of proceedings following Huawei v ZTE by the Local Divisions Mannheim (decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO, mn. 191 ff.; Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 223 ff.), Munich (decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 129 ff.) and Düsseldorf (UPC_CFI_135/2024, decision of 18 March 2026, - Dolby vs. Beko, mn. 472),

which is as follows:

232 The ECJ’s negotiation framework is not focused solely on determining the respective licensing terms, which would be stripped of an assessment of the respective conduct of the parties during the negotiations. Rather, the central concern of Huawei/ZTE is to establish a negotiation framework with reciprocal obligations that simultaneously serves to assess the question of primary EU law as to whether the enforcement of the patent holder’s rights of injunctive relief, recall and removal is subject to antitrust restrictions. The determination of a FRAND licence rate, if any, is merely one component of this framework. An assessment of the terms of a FRAND licence that disregards the steps established by the ECJ—in the sense of determining the licence fee on purely economic grounds without taking into account the relevant conduct of the parties involved in the negotiations— does not comply with Union law and would therefore violate mandatory law in the Member States.

233 According to the ECJ, before filing an action for an injunction, the SEP holder must first notify (“alert”) the patent user of the alleged patent infringement. In doing so, the holder must identify the patent in question and specify how it is alleged to have been infringed (ECJ, loc. cit., para. 61, para. 71). In a subsequent step—also prior to filing a lawsuit—the patent user must then initially express its willingness to enter into a licence agreement on FRAND terms (ECJ, loc. cit., para. 63, para. 71). It must not be limited to mere “lip service”, but must be sincere so that it can serve as a basis for further negotiations.

234 However, simply examining the initial statement is generally insufficient when determining whether the implementer is seriously interested in obtaining a licence. A statement to this effect is not, in and of itself, sufficient to determining whether the implementer in question is genuinely serious about it. In this regard, the implementer’s conduct throughout the negotiations must always be considered in its entirety. On the other hand, the assessment of FRAND-compliant conduct must not focus solely on the

implementer's willingness to take a licence, in the sense of analysing only its conduct. Therefore, it is incorrect to assess "willingness to licence" solely based on the patent user's counteroffer, if any, and by using that counteroffer as an indication for or against the seriousness of the user's conduct without first considering the SEP holder's offer. Under such an understanding, there would be a significant risk that the required examination of the offer made by the SEP holder, who is bound by antitrust law, will be entirely omitted or, at best, conducted only superficially.

2. Patent holders' obligation to place an offer

- 235 The Local Division Hamburg agrees with the LD's Mannheim and Düsseldorf, that provided that the initial willingness to take a licence has been sufficiently demonstrated by the implementer, the SEP holder's offer must in principle always be reviewed for compliance with FRAND principles (LD Mannheim, decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO; Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 227; LD Düsseldorf, decision of 18 March 2026 – UPC_CFI_135/2024 – Dolby vs. Beko, mn. 492; differentiating: LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 135). This step must, in principle, not be omitted or carried out only in a cursory manner. In this regard, an examination that seeks to comply with the case law of the ECJ must not only analyse the patent user's conduct for indications to allege a lack of willingness to licence, without seriously examining the SEP holder's offer. The SEP holder is therefore generally obliged, when submitting its offer, to demonstrate and explain – to the best of its ability given the stage of negotiations – why it considers that the offer it has submitted can be regarded as FRAND-compliant. If the SEP owner's offer is not found to be FRAND, there is no injunction and no undue pressure on an implementer to accept licence terms, which are not FRAND.
- 236 However, the interplay of reciprocal obligations in the negotiations are also determining the patent holder's obligations with respect to his offer as defendants cannot expect the claimant to make an offer that fully reflects the circumstances concerning them if they are unwilling to disclose these circumstances (LD Mannheim, decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO, mn. 202).
- 237 The court's assessment depends on the parties' allegations and arguments in a party-driven pre-trial process. This means, that the extent to which the court examines the claimant's conduct depends to a large extent on which points the patent infringer raised against the patent holder during the negotiation process and, conversely, what information the patent holder made available to the patent infringer in order to be able to make an offer tailored to the infringer's circumstances. Objections raised solely in court against the backdrop of the threat of an injunction are not sufficient. This is because, save in extreme circumstances, the patent infringer is always under an obligation to respond to an offer from the SEP holder and, at the very least, to raise objections to it and request amendments (LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 135; LD Mannheim, Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 228).

238 On a general note, it is uniformly accepted that FRAND is a range (LD Mannheim, decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO, mn. 224). This means, there is not just a single FRAND offer, but, within that range, several forms of licence agreement, all of which may satisfy the FRAND criteria. Consequently, the claimant retains a margin of manoeuvre within this range. For competition law reasons, it is not obliged to submit the cheapest offer still falling within the corridor. Nor is it required to base its offer on a calculation method preferred by the other party. From the perspective of reasonableness, it must simply not deviate in a manner that can no longer be justified from the circumstances used as benchmarks— whether these circumstances are set out in its own licence agreements, which generally carry the strongest evidential weight, or in the terms of licence agreements used for comparison, which have, for example, been discussed in court decisions and which can be applied to the specific circumstances (LD Mannheim, decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO, mn. 224).

239 Where the patent holders have made several offers, provided that the above-mentioned conditions are met, their latest offer still open for acceptance must be assessed for compliance with FRAND. The mere submission of an initial offer that does not comply with FRAND does not in itself constitute market abuse (LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 136). Rather, this merely represents the starting point for negotiations, during which the patent holder is expected to develop an offer that complies with FRAND. Only if the patent holder “is not prepared to back down [from unreasonable licensing terms] even at the end of negotiations” does abusive conduct exist. Hence, the patent proprietor’s last standing offer needs to be examined by the Court (LD Mannheim, decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO, mn. 221 ff.).

3. Pool v bilateral route

240 In principle, the patent holder can fulfil its obligations by either offering a pool license or a bilateral license. The ECJ in Huawei v. ZTE did not address patent pool licensing. The judgment concerned a bilateral dispute between a single SEP holder and a single implementer. The ECJ’s framework establishes the obligations that the SEP holder must fulfil before seeking an injunction but does not prescribe the channel through which these obligations must be discharged.

241 In so far as the patent holder has, in accordance with the Huawei v. ZTE programme, made an offer relating to a bilateral license to the patent holder’s portfolio AND an offer relating to a license to the portfolio of a patent pool in which the patent to be licensed or the patent holder’s portfolio is included, the infringement action seeking an injunction, recall and destruction cannot be dismissed if it is to be assumed that at least one of the two offers satisfies the requirements of competition law. This is because, for competition law reasons, the patent holder is only required to indicate to the patent user one licensing route that satisfies the FRAND requirements (LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 136).

- 242 However, there are constellations where the implementer can demand a bilateral licence instead of a pool licence. Such constellations are for example, but non-exclusively, given when the implementer expressed its desire to obtain a multi-standard-licence or to sign cross-licencing agreements with the individual patent proprietors. The same applies when an implementer had already advanced with a significant number of other pool contributors to conclude bilateral licences for the whole pool portfolio.
- 243 In these constellations, it follows the contracting obligations under antitrust law that the SEP-holder is required to engage in bilateral license negotiations upon the license seeker's reasonable request, and in such a case cannot simply refer the license seeker to the possibility of a pool license. The implementer's demand can then be based in the prohibition of agreements that could disrupt competition according to Art. 101 TFEU and the prohibition to abuse a dominant position according to Art. 102 TFEU.
- 244 This is addressed in the European Commission's Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements (2014/C 89/03), according to which "Licensors and licensees should be free to develop competing products and standards" and "should also be free to grant and obtain licences outside the pool." (mn. 270). This is also reflected by the rules established with the majority of (if not all) standardization bodies and pools, who – as in the present case in point 8.1. of the Via pool conditions – acknowledge the licensees' freedom to choose the bilateral route.
- 245 Having said that, as the interests of both sides have to be brought into balance, the implementer can only successfully demand a bilateral offer instead of a pool offer, when he/she has comprehensible reasons for this choice. Furthermore, choosing the bilateral route does not ease the implementer's obligation to show its willingness to sign a licence throughout the course of the negotiations (comp. LD Mannheim, Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 237). It has to be noted that demanding a bilateral offer is not, in and of itself, sufficient to determine that the implementer is also genuinely serious about it. In this regard, the implementer's conduct throughout the negotiations must always be considered in its entirety. In particular, an implementer's insistence on bilateral licensing can still indicate unwillingness when the implementer fails to present comprehensible reasons for its decision to opt for bilateral agreements, failed to conclude bilateral agreements with the other SEP pool licensors in reasonable time, and refrained from placing a security. This is even more true when initially being provided a FRAND pool offer.

III. APPLICATION TO THE PRESENT CASE

- 246 In the present case, Defendant has not convincingly demonstrated that its insistence on a bilateral licence, despite being offered a FRAND conform pool licence, is based on comprehensible reasons. Taking all circumstances of the case into account, including that Defendant never came into possession of sufficient bilateral agreements with the other SEP pool licensors, and even then, refrained from placing a security for Claimant's

potential licence claims, Defendant cannot be considered to be truly willing to sign a licence for the use of the patented technology.

1. Notification

247 In the present case it is not disputed that the Via pool respectively Claimant notified the Defendant of the infringement of the asserted patent claims.

2. Negotiations started 2017.

248 As intended by the ECJ, the parties entered into negotiations concerning a license agreement back in 2017.

a) Via's FRAND pool offer

249 Undisputedly, Via provided Defendant an offer at the in-person meeting of 24 October 2017 with a power point presentation [REDACTED] containing information on the Licensor Partners of the Via AAC patent pool as well as the License Scope and AAC license fees [REDACTED], starting from [REDACTED]. Subsequently, Via sent the Defendant, by email dated 28 November 2023, a copy of the standard license agreement and an up-to-date 'essentiality overview of the patents', in which the relevant essential patent claims of the essential patents are mapped to the representative sections of the standard [REDACTED]

250 Via's pool offer contained a word-wide rate table with [REDACTED] discounts plus the offering of a split rate table, also with volume discounts [REDACTED]. It is not disputed that Via last [REDACTED] the Defendant on 20 October 2024, at which Via sent the Defendant an updated [REDACTED] and the latest version of the AAC patent license agreement [REDACTED]

251 While Via indicated that the Defendant has the option to negotiate bilateral licenses directly with the individual licensors instead of taking a pool license in the same first letter (Exhibit HL – FRAND 3), the panel has to consider the pool offer being FRAND. That is because Defendant neither out of court nor within the present proceedings raised substantiated argument against the FRAND nature of the pool offer.

252 The extent to which the court examines a patent proprietor's conduct or the conduct of a pool acting on the patent proprietor's behalf is limited and depends to a large extent on which points the patent infringer raised against the patent holder during the negotiation process and, conversely, what information the patent holder made available to the patent infringer in order to be able to make an offer tailored to the infringer's circumstances (LD Munich, decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 135; LD Mannheim, Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 228). Objections raised solely in court against the backdrop of the threat of an injunction are not relevant, if they could have been raised in the negotiations in the first place. This means, the fact that the Defendant in the present proceedings claimed for the first time that [REDACTED]

██████████ – and even that for the first time in its Rejoinder Part II (mn. 364-367) – cannot be deemed a valid defence.

253 For avoidance of doubt, Defendant’s late filed critique that the “aging of the AAC technology and patent expiry” had not been considered and that (Claimant’s) ██████████ “was unFRAND, is not convincing, to begin with. Not only were the lists of the patents involved (“AAC essential patent list”) communicated to Defendant from the beginning (see e-mail dated 24 August 2017 Exhibit BP 5e and e-mail 2 October 2024 Exhibit BP 5) and but Defendant ██████████

██████████ It is also substantially undisputed that at the time of Via’s (and Claimant’s) first offers, Claimant’s share of patents in the Via AAC patent pool ██████████ and ██████████ as new patents entered into the pool due to technological developments.

254 Furthermore, it is substantially undisputed, that there is a practice of ██████████ which is accepted by nearly the entire worldwide market. Defendants did not present any indication that nearly 1,000 licensees entered into agreements with Via without the volume discounts being applied. Claimant also successfully demonstrated that volume discounts are not specific to the Via AAC pool. For instance, the Access Advance HEVC pool for video coding technology with far over 300 licensees applies volume discounts in the form of category caps and company ceilings, as well.

255 Finally, the Via offer contained also an alternative rate structure, offering lower rates for R2 countries in recognition of the reduced patent coverage in those markets as an option.

b) No comprehensible reasons for demanding the bilateral route

256 Defendant, when demanding a bilateral licence instead of the offered FRAND pool licence, failed to present comprehensive reasons for this decision.

257 During the negotiations, Defendant neither requested a multi-standard-licence from Claimant nor explained that such a question in mind was the reason behind its demand of bilateral licence instead of a pool licence. It is also self-evident that Claimant, as a research institute, is no suitable counterpart for a cross-licencing, anyway. While Defendant pointed out in the negotiations that it had already advanced with a significant number of other pool contributors to conclude bilateral licences for the whole pool portfolio, it was not in possession of other bilateral agreements with the other SEP pool licensors within reasonable time (see also below).

258 Since 2018 Defendant signed licenses ██████████ cf. exhibit BP-5e). This means, in the time span of four and a half years after Via’s first pool offer in October 2017 Defendant was not able to conclude bilateral licence agreements with the majority of the other pool contributors, not just apart from Claimant. Hence, Defendant cannot successfully claim that its continuous insistence on bilateral licences is based on advanced and fruitful negotiations with the rest of the pool contributors. To the contrary, it is undisputed that

[REDACTED] anymore. That means, out of the almost nine years that have passed up and until today after the initial (FRAND conform) pool offer, Defendant never possessed more than a fraction of the technology covered by the bilateral licences and for not more than a short period of time, rendering the Defendant's demand unreasonable.

c) Further assessment of willingness

259 The fact, that Defendant, while implementing the patented technology of the patent in suit, did not successfully enter into bilateral agreements with the majority of the other pool members, and refrained from placing a security despite of that, allows only the conclusion that Defendant is at the core unwilling to sign a licence with Claimant.

260 Whereas, as reflected in the pool conditions themselves, the implementer can demand a bilateral licence instead of a pool licence, it has to show its willingness to sign a licence throughout the course of the negotiations (LD Mannheim, Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 237). To assess whether the expressed willingness is of true nature, not only the reasons for its decision to opt for bilateral agreements have to be examined, but also the other elements of its conduct. In particular, it has to be examined if the implementer's demand for a bilateral route was abused simply to gain time. Especially, when being presented with a FRAND conform pool offer, it has to be expected that the implementer closes bilateral licence agreements with the individual patent holders in due course.

261 This has not happened.

262 Defendant did not sign bilateral licences with the pool contributors within reasonable time. As stated above, since 2018 Defendant signed licenses [REDACTED] (cf. exhibit BP-5e). In the time span of four and a half years after Via's first pool offer in October 2017 Defendant used the AAC standard without licence agreements covering this use, making it doubtful that Defendant was truly seeking licences for the use of the patented technology. In addition, it is undisputed that [REDACTED] anymore. Out of the almost nine years that have passed up and until today after the initial (FRAND conform) pool offer, Defendant only had a fraction covered by bilateral licences.

263 While this might in part be related to a reluctance of the patent holders to close bilateral licence agreements in general, or with the Defendant in particular, as argued by Defendant, this situation does not release Defendant from its obligation to re-assess its negotiation strategy, to react properly and to safeguard successful negotiations by placing a security for the patent holders' potential licence claims. Otherwise, the Defendant cannot successfully prove to have true and comprehensible reasons to insist on the bilateral route. This is not altered by Defendants' statement that the bilateral licences were cancelled by the respective licensors, as Defendant never was in the possession of more than three bilateral licence agreements, anyway. This is a situation, as burdensome as it may be, where it requires the implementer to take further steps to

secure the desired bilateral licences when still denying the pool offer, such as securing the patent holders' interests by placing a security. This has not happened, either. It took Defendant almost eight and a half years to state that it "considers" the placing of a security for Claimant's possible licence claims (Rejoinder Part II, mn. 371), however, without following through with it.

264 For avoidance of doubt, this does not mean that panel concurs with the concept of an automatic trigger followed by the LD Munich (decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 140; decision of 11 February 2026 – UPC_CFI_171/2025 - Philips v Belkin, p. 33) and the German Federal Court of Justice in the recent decision against the very Defendant dated 27 January 2026 (KZR 10/25 – VoiceAge EVS v. HMD), according to which the placement of a security is always a mandatory condition and without any security the FRAND defence can always be dismissed right away. To the understanding of the panel such an approach would not be in line with the programme the ECJ envisaged (see LD Mannheim Local Division, decision of 22 November 2024 – UPC_CFI_210/2023, paras. 195–198).

265 However, in a case where there is a pool offer, which was never contested and thus has to be considered FRAND, and where the bilateral negotiations with the patent proprietor over the course of almost nine years never let to the closing of a licence agreement, let alone with almost all the other pool contributors, the implementer's choice not to place a security has to be considered yet another sign of unwillingness.

d) Result

266 Taking the Defendant's conduct as a whole into account, it cannot be assumed that the Defendant is genuinely prepared to sign a licence agreement with the claimant. Defendant's insistence on bilateral licensing despite a FRAND pool offer, while failing to conclude bilateral agreements with the vast majority of pool licensors for (more than) seven years is an unyielding demand which does prove its unwillingness (comp. Higher Regional Court Düsseldorf, GRUR 2022, 1136, mn. 183), in particular when not followed by a security. This conduct over the course of – up and till today – almost nine years is no basis to object to a patent proprietor's legal action before a competent court.

267 As there has been no sufficient indication of a willingness to sign a licence by Defendant prior to the bringing of the action, in accordance with the principles established in Huawei v. ZTE the assessment process is terminated. Whether the claimant's offer(s) meets the FRAND requirements – which would be the next step in the assessment process had there been a sufficient indication of a willingness to grant a licence – therefore no longer needs to be examined.

3. No reference to the ECJ

268 There was no need to make a reference to the ECJ. In matters concerning the correct interpretation of European law, the Court of First Instance may refer questions relevant to the decision to the ECJ, Art. 21 UPCA, Art. 267 TFEU.

269 For one, the panel sides with Defendant that there can be constellations where the request for a bilateral licence offer even in the presence of a pool offer is justified. However, the questions arising in the present case relate solely to the assessment of the implementer's willingness in the specific case at hand and can be resolved by applying the principles developed by the ECJ, which enable the courts responsible for applying the law in individual cases to make a proper assessment of the case in question.

K. CONSEQUENCES

I. RIGHT TO REQUEST AN INJUNCTION

270 Taking into account the circumstances of the case, Claimant is entitled to an injunction prohibiting the continuation of the infringement pursuant to Art. 25(a) in conjunction with Art. 63 (1) UPCA. If the patent proprietor brings an action for infringement and the court finds that an intellectual property right has been infringed or is at risk of being infringed, it shall issue an order prohibiting the continuation of the infringement, provided there are no specific grounds against doing so, Art. 3 of the Enforcement Directive (2004/48/EC). When assessing the proportionality of injunctions and other measures, account may be taken not only of the interests of the parties to the proceedings, but also of the interests of third parties (UPC_CoA_464/2024, decision of 25 November 2025, headnotes 14–16 – Meril v Edwards).

1. Injunction

271 In applying these principles, there is no apparent reason to refrain from issuing an injunction. Rather, proportionality considerations have already been comprehensively taken into account in the context of assessing the compulsory licence (FRAND) defence under competition law, by applying the balanced approach set out by the programme of proceedings following Huawei v ZTE by the Local Divisions Mannheim (decision of 22 November 2024 – UPC_CFI_210/2023 – Panasonic v OPPO, mn. 191 ff.; Decision of 16 June 2026 – UPC_CFI_86/2025 – InterDigital v The Walt Disney Company et al, mn. 223 ff.), Munich (decision of 18 December 2024 – UPC_CFI_9/2023 – Huawei v Netgear, p. 129 ff.) and Düsseldorf (UPC_CFI_135/2024, decision of 18 March 2026, - Dolby vs. Beko, mn. 472).

272 As Defendant does not prevail with its FRAND defence, the requested injunction has to be granted. It is the implementer's responsibility to secure a licence. The Claimant's interest is not outweighed by another potential remedy, as Defendant hasn't provided a security.

2. Claims prior 1 June 2023 / Opt-In

273 It follows the case-law of the UPC that for actions that have occurred before the entering into force of the UPCA, the national law remains applicable (LD Hamburg, decision of 11 February 2026 – UPC_CFI_274/2023 – FIVES ECL v REEL GmbH, mn. 29 ff; LD Mannheim, UPC_CFI_162/2024, decision of March 11, 2025, Hurom vs. NUC Electronis, Headnote 4). It has to be differentiated in the following way:

- a) to acts committed after the entry into force of the UPCA, the substantive law as laid down in the UPCA applies;
- b) to acts committed before the entry into force of the UPCA, the substantive national laws apply;
- c) to ongoing acts started before the entry into force of the UPCA and continued after the entry into force on 1 June 2023, the substantive law as laid down in the UPCA applies.

274 Although the UPCA – as the new law – does not apply to legal relationships that arose under the old legal system and have become final, it does apply in the present case to the infringing acts conducted by Defendant as it relates to the future effects of a legal relationship that arose under the law in force prior to the amendment and have not become final, as well as to facts that arose after the new law came into force (comp. LD Hamburg, decision of 11 February 2026 – UPC_CFI_274/2023 – FIVES ECL v REEL GmbH, mn. 33). Thus, not only the requests for injunctive relief, but also for damages, recall, removal, destruction and information as future effects of ongoing infringing acts are governed by the UPCA, even when initiated before 1 June 2023.

3. No claims prior to the release of Android 9

275 As Claimant directed its infringement allegations against devices, in particular smartphones and tablets, all using Android OS version 9 or higher, and as Android 9 was released on 6 August 2018, the claims can only be granted taking on 6 August 2018 as the new starting point. This was adjusted by the Claimant with the change of claims by Claimant's Reply, R. 263 RoP.

4. Not time-barred

276 As far as the actions in question are ongoing they are not subject to a time-bar from the outset. Although Defendant did not specify which acts were finalized at a given point in time and thus could be subject to a time-bar, Claimant's requests are not time-barred in the present case.

277 Article 72 UPCA states a five-year limitation period, which according to the Defendant means that the Claimant's claims are (partially) time-barred at least for the period before 4 June 2020 (as the action was filed on 4 June 2025). In addition, Defendant claims that pursuant to Articles 72 and 24(2), (3) UPCA, the shorter national limitation period of three years under Sections 195 and 199 of the German Civil Code (BGB) also applies, which should be resulting in the dismissal of Claimant's claims insofar as Claimant asserts past claims for the period before 1 January 2022.

278 While the Defendants reference to the shorted period under German Law is correct as the regular limitation period is three years, starting from the end of a year, §§ 195, 199 German Civil Code, the consequence are not as desired by Defendant. As there were negotiations in the past, this suspends the limitation period from running. The relevant § 203 German Civil Code states:

279 1Where negotiations are ongoing between the debtor and the creditor regarding the claim or the circumstances giving rise to the claim, the limitation period is suspended until one or the other party refuses to continue the negotiations. 2The limitation period begins to run no earlier than three months after the suspension ends.

280 According to German Law, if the person entitled to compensation allows the negotiations to lapse, the suspension ends at the point in time when the next step in the negotiations would have been expected of them (BGH NJW 2009, 1807). But still, even the fact that Claimant did not continue the negotiations between 6 December 2019 and 26 January 2023, does not lead to a time bar of sales that were conducted within that period. Limitation was suspended for three months after walking away from negotiations, i.e. until 6 March 2020, § 203 2nd sentence German Civil Code. Claims afterward start to fall under the statute of limitations at the end of the year 2020, and lapse at the end of 2023. As early in 2023 the negotiations were resumed no time-bar is applicable.

2. Recall, removal from the supply chain and destruction

281 The decision regarding the recall, as well as the definitive removal from the supply chain and destruction, is justified under Article 25(a) of the UPC Regulation in conjunction with Article 64(2)(b), (d) and (e), and (4) of the UPC Regulation.

282 Removal is expressly requested only with respect to infringing products pursuant to Sec. A.I.1, which have been placed on the market since August 6, 2018 in the Federal Republic of Germany, the French Republic, the Republic of Italy, the Kingdom of Belgium and the Kingdom of the Netherlands. Destruction is requested only for the same infringing products referred to in Sec. A.I.1., which are directly or indirectly within their possession and/or ownership from the distribution channels. This is not disproportionate.

III. DECLARATION OF LIABILITY FOR DAMAGES ON THE MERITS

283 The declaration of liability for damages on the merits is based on Article 68(1) UPCA. Pursuant to this Article the court shall, upon application by the aggrieved party, order that the infringer, who knew or ought reasonably to have known that he was committing an act of patent infringement, shall pay the aggrieved party reasonable damages to compensate for the actual loss suffered by the latter as a result of the infringement. Defendant was since being approached by the Via pool aware of the intellectual property rights in question, hence before placing the contested embodiments with Android 9, i.e. after 6 August 2018, on the market.

IV. PROVISION OF INFORMATION AND ACCOUNTING

284 Claimant is entitled to information pursuant to Article 25(a) UPCA in conjunction with Article 67 UPCA. There are no objections regarding the manner in which the information is to be provided. The Claimant may also request the production of supporting documents for the information under Article 67(1) UPCA.

V. PENALTY

285 The imposition of a penalty payment in connection with an injunction follows Art. 63(2) UPCA. The imposition of a penalty payment in respect of the measures of provision of information, recall, removal and destruction is based on Art. 82 (1) and (4) UPCA, R. 354.3 RoP. The penalty frame of up to EUR 100,000 for each day of infringement of the injunctions, EUR 50,000 for each day of non-compliance with the orders to recall, destroy and remove, as well as of EUR 10,000 for each day of non-compliance with the order to provide information, is appropriate and gives the Local Division the necessary flexibility to take into account, in the event of non-compliance, the specific circumstances of the individual case — including the conduct of the infringer — and, on that basis, to set an appropriate penalty payment in accordance with Article 82 (4), 2nd sentence UPCA in conjunction with R. 354.4 RoP.

VI. PUBLICATION

286 The request for publication of the decision is dismissed. Despite the severity and continuity of Defendants infringement without taking a licence of placing a security, FRAND cases are closely watched by the legal community, and Defendant is a very prominent participant in court proceedings, nationally as internationally. Hence, any decision in the present case is already granted some publicity, which sufficiently ensures Claimant's interests.

VII. INTERIM AWARD OF COSTS

287 The request for an interim award of costs is well-founded.

288 Pursuant to R. 119 RoP, the court may award the successful party provisional damages intended to cover, at the very least, its anticipated costs in the proceedings for damages and compensation. Claimant's estimation for these costs, based on a value in dispute of EUR 1,500,000 and in accordance with the UPCA scale of fees (Court costs: EUR 19,000 and Legal representation costs: EUR 200,000), appear reasonable. The potential licence fee that might be claimed as damages for the use in the past year, will pretty likely exceed these numbers. R. 119 RoP is designed to secure a claimant not to bear the full risk of Defendant's potential insolvency throughout all subsequent procedures.

VIII. SECURITY

289 Where appropriate, the enforcement of a decision may, pursuant to Art. 82(2) UPCA, be subject to the provision of security or an equivalent assurance to ensure compensation for any damage suffered, in particular in the case of injunctions. According to R. 352.1 RoP, decisions and orders may be subject to the rendering of a security (whether by deposit or bank guarantee or otherwise) by a party to the other party for legal costs and other expenses and compensation for any damage incurred or likely to be incurred by the other party if the decisions and orders are enforced and subsequently revoked.

290 In the present case, Defendant hasn't requested that the Claimant places a security, but only that Defendant is permitted to avert enforcement by providing security. Also, there are no signs that the Claimant, who is a well-known public research institution, would not be able to reimburse any damages in case the measures are lifted.

291 Whereas the practice of the other Local Divisions varies (LD Munich, UPC_CFI_9/2023, Huawei v Netgear: 1 Mio EUR; LD Mannheim, UPC_CFI_210/2023 Panasonic v Oppo: 10 Mio; no security: LD Düsseldorf (UPC CFI 135/2024), it has to be seen that the injunction has a massive effect on the Defendant's business. Hence, a security in the amount of EUR 1 Mio seems appropriate for the injunctive relief, EUR 350,000 for recall and destruction, and EUR 150,000 for information.

IX. COSTS

292 The distribution of costs occurred followed the outcome of the proceedings. The partly reduction of the requested injunction with the Reply (R. 263) is not significant. Also, the scope of reduction of the patent as granted remains insignificant in relation to the counterclaim as a whole.

DECISION

A. Defendant is ordered

I. 1. to cease and desist from offering, placing on the market, using or importing or processing or storing for the aforementioned purposes in the Federal Republic of Germany, the French Republic, the Republic of Italy, the Kingdom of Belgium and the Kingdom of the Netherlands, devices for decoding a signal, in particular smartphones or tablets that use Android version 9 or higher and make use of the USAC standard, comprising the following components:

a transient separator for separating an apparatus input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the input signal and such that the second signal component comprises non-transient signal portions of the input signal;

a transient decorrelator for decorrelating the first signal component according to a first decorrelation method to obtain a first decorrelated signal component;

a further second decorrelator for decorrelating the second signal component according to a second decorrelation method to obtain a second decorrelated signal component, wherein the second decorrelation method is different from the first decorrelation method;

a combining unit for combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal;

wherein the combining unit is adapted to combine the first decorrelated signal component and the second decorrelated signal component by adding the first decorrelated signal component and the second decorrelated signal component;

and a mixer being adapted to receive mixer input signals and being adapted to generate output signals based on the mixer input signals and a mixing rule;

wherein the combining unit and the mixer are arranged so that the decorrelated combination signal is fed into the mixer as a first mixer input signal and that the apparatus input signal or a signal derived from the apparatus input signal is fed into the mixer as a second mixer input signal.

(Direct infringement of claim 1 of EP 2 609 590 B1 in the form set out in Auxiliary Request 1 - Exhibit BP-AR 1)

I.2. to cease and desist from offering or offering to supply in and for the use in the Federal Republic of Germany and/or the French Republic and/or the Republic of Italy, and/or the Kingdom of Belgium and/or the Kingdom of the Netherlands, means, namely smartphones and tablets that use Android OS version 9 or higher and make use of the USAC standard, and which are suitable and intended for applying a method for decoding a signal, comprising the following steps:

separating an apparatus input signal into a first signal component and into a second signal component such that the first signal component comprises transient signal portions of the apparatus input signal and such that the second signal component comprises non-transient signal portions of the apparatus input signal;

decorrelating the first signal component by a transient decorrelator according to a first decorrelation method to obtain a first decorrelated signal component;

decorrelating the second signal component by a further second decorrelator according to a second decorrelation method to obtain a second decorrelated signal component, wherein the second decorrelation method is different from the first decorrelation method;

combining the first decorrelated signal component and the second decorrelated signal component to obtain a decorrelated combination signal by adding the first decorrelated signal component and the second decorrelated signal component;

and generating output signals based on a mixing rule, the decorrelated combination signal and the apparatus input signal.

(Indirect infringement of claim 12 of EP 2 609 590 B1 in the form set out in Auxiliary Request 1 - Exhibit BP-AR 1)

II. at their own expense,

1. to recall from commercial customers the infringing products pursuant to Sec. A.I.1 and placed on the market in Federal Republic of Germany, the French Republic, the Republic of Italy, the Kingdom of Belgium and the Kingdom of the Netherlands since August 6, 2018, by written notice referring to the patent infringing condition of the

products as established by decision of the Unified Patent Court and with a binding commitment to reimburse any fees as well as to assume all necessary packaging and transport costs, including customs and storage costs associated with the return, and to take back said products; Claimant is to be provided with a sample of the recall letter as well as a list of recipients including names and postal addresses or, at Defendant's option, an electronic copy of all recall letters.

2. to definitively remove the infringing products pursuant to Sec. A.I.1, which have been placed on the market since August 6, 2018, from the distribution channels, taking in particular the following measures:

a. Defendant shall take all possible and reasonable measures to identify the locations and owners of such products referred to in Section A.I.1.

b. To the extent that Defendant themselves has legal or actual control over such products referred to in Section A.I.1., they must take all legally permissible and reasonable measures so that these products come into, and remain in, the immediate possession of Defendant.

c. To the extent that Defendant does not have legal or actual control over such products referred to in Section A.I.1., they must take all legally permissible and reasonable measures either (i) so that persons holding claims for surrender or destruction against those having control over said products assert such claims, or (ii) support these persons in asserting their claims.

3. destroy the infringing products referred to in Sec. A.I.1., which are directly or indirectly within their possession and/or ownership, or alternatively deliver them up for destruction by a bailiff appointed by Claimant.

III. to provide Claimant with information in an electronic, organized, computer-searchable directory on the extent to which they have committed the acts referred to in request A.I. above since August 6, 2018, within a period of 30 days after service of the notification within the meaning of R. 118.8 sentence 1 RoP and, if applicable, the certified translation, stating

1. the origin and distribution channels of the infringing products broken down by year, and the names and addresses of the commercial customers;

2. the quantities produced, manufactured, delivered, received or ordered, as well as the price obtained for the infringing products; and

3. the identity of any third person involved in the production or distribution of the infringing products or in the use of the infringing process; and

4. the advertising operated, broken down by advertising media, their circulation, distribution period and distribution area, in the case of Internet advertising, the domain, the access figures and the placement periods,

5. the prime costs broken down by the individual cost factors and the profit generated, whereby electronic copies of the relevant documents (namely invoices)

are to be submitted as proof of the information, whereby details outside the required information requiring confidentiality may be redacted;

IV. to pay Claimant an amount of EUR 219,000 as an interim award of damages.

B. Defendant is obligated to compensate Claimant for all damages that Claimant has suffered and will suffer as a result of the acts set forth in Sec. A.I. above, committed since August 6, 2018.

C. On the Counterclaim for revocation EP 2 380 167 is upheld in the form set out in Auxiliary Request 1 - Exhibit BP-AR 1); Defendant's exceeding counterclaim for revocation is rejected.

D. The further requests are dismissed.

E. In case of any violation of the order under Sec. A.I., A.II. and/or A.III. above, Defendant shall pay a penalty payment to the Court in the amount of

- up to EUR 100,000 for each day of violation of the order pursuant to A.I.,
- up to EUR 50,000 for each day of violation of the order pursuant to A.II., and
- up to EUR 10,000 for each day of violation of the order pursuant to A.III.,

F. Defendant shall bear the costs of the proceedings.

G. The judgment is directly enforceable. In the event that a security is ordered, Claimant is permitted to provide it also in the form of a bank or savings bank guarantee, and the amount of the security is determined separately for the individual enforceable parts of the judgment, with the following individual amounts proposed:

Injunction: EUR 1,000,000.-

Recall and Destruction: EUR 350,000.-

Information: EUR 150,000.-

Interim award of damages: the amount to be enforced

SIGNATURES

Sabine Klepsch Presiding Judge	SABINE MARIA KLEPSCH Digital unterschrieben von SABINE MARIA KLEPSCH Datum: 2026.08.21 14:36:34 +02'00'
Dr. Stefan Schilling Legally qualified Judge and Judge-rapporteur	STEFAN SCHILLING Digital signiert von STEFAN SCHILLING DN: cn=STEFAN SCHILLING, c=DE, email=stefan.schilling@unifiedpatentcourt.org Datum: 2026.08.21 12:08:50 +02'00'
Peter Agergaard Legally qualified Judge	Digitally signed Agergaard Peter Juul 2026-08-21 18:17:32 +0200 Unified Patent Court Einheitliches Patentgericht Jurisdiction unifiée du brevet

Dr. Christoph Norrenbrock Technically qualified Judge	Digitally signed Dr. [REDACTED] 15:14:38 +0200 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet
For the sub-registry	Digitally signed [REDACTED] 10:08:23 +0200 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet

INFORMATION ON APPEAL

An appeal against this decision may be brought before the Court of Appeal by any party whose claims have been unsuccessful, in whole or in part, within two months of service of the decision (Art. 73(1) UPCA, R. 220.1 (a) RoP, 224.1 (a) RoP).

INFORMATION OF ENFORCEMENT (ART. 82 UPCA, ART. 37(2) UPCS, R. 118.8, 158.2, 354, 355.4 RoP)

An authentic copy of the enforceable order will be issued by the Deputy-Registrar upon request of the enforcing party, R. 69 RegR.

INSTRUCTION TO THE REGISTRY

A certified copy of the decision shall be sent to the European Patent Office and the national Patent and Trademark offices as soon as the decision on the revocation action has become legally binding.

This decision was announced in public session on 24 August 2026

Dr. Stefan Schilling

Legally qualified Judge