

**Title:**

**Patent exploiter as plaintiff in a FRAND case**

**Machine Translation**

**Law applied:**

European Patent Convention (EPC) Art. 64 para. 1, para. 3

German Patent Act (PatG) 10 para. 1, Section 145a, Section 139 para. 1 sentence 1, Section 140a para. 1, para. 3, Section 140b para. 1, para. 3

TFEU Art. 102

Code of Civil Procedure (ZPO) Section 110, Section 148, Section 717 para. 2, para. 3

**Summary:**

**1. When assessing the plaintiff's license offer, it is irrelevant that the plaintiff is a patent exploiter. In the context of a sensible division of labor, it is understandable and beneficial if a separation is made between development and exploitation. This is because innovative forces are only given the opportunity to bring about progress if they are not distracted by exploitation requirements. There is therefore a legitimate interest, and one that is even worthy of support, in delegating the exploitation of patents to specialized units.**

**2. The exploitation of patents by companies without their own development activities represents an economically reasonable division of labor that serves to promote innovation. Therefore, the antitrust requirements for NPEs (Non-Practicing Entity) and inventors are identical.**

**3. If the defendants assert a possible counterclaim significantly exceeding the amount in dispute pursuant to Section 717 (3) Code of Civil Procedure (ZPO), they must make a substantiated submission in this regard and substantiate this submission with reliable documents. As a rule, it will not be sufficient to make a general claim that the potential loss represents a certain percentage of turnover. As a rule, such claims must be substantiated by tax documents (tax returns and tax assessments). As the setting of a high security deposit considerably weakens the claim for injunctive relief, the considerable burden of presentation associated with this must be accepted.**

**Keywords:**

Patent infringement, FRAND objection, prior art, pilot tones, OFDMA framework, market power, willingness to license, declaration of invalidity of the patent, FRAND criteria, inadmissible extension, feasibility of the invention, anticipation prejudicial to novelty, inventive step

**Reference:**

GRUR-RS 2024, 11655

**Tenor**

I. The defendants are ordered,

1. subject to a fine of up to EUR 250,000 for each case of non-compliance, alternatively imprisonment for up to 6 months or imprisonment for up to 6 months, in the event of a repeat offense imprisonment for up to 2 years, whereby the imprisonment is to be enforced on the respective managing director of the defendants, to cease and desist from

offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany, i.e.,

(a) wireless devices capable of being used to perform a method for transmitting a frame,

the method comprising:

Providing pilots in a resource unit; and transmitting the frame including the resource unit, wherein the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, and wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position tone separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(indirect patent infringement of claim 1 of EP 3 295 571 B1)

and/or

b) offering and/or supplying wireless devices capable of being used to perform a method for receiving a frame to third parties in the Federal Republic of Germany who are not authorized to use the teaching of EP 3 295 571 in the Federal Republic of Germany,

wherein the method comprises:

receiving the frame including a resource unit including pilots; and processing the pilots, wherein the frame includes a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, when a lowest subcarrier of the resource unit has even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, and wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, and wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position separated by thirteen

subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(indirect patent infringement of claim 7 of EP 3 295 571 B1)

2. to provide the plaintiff with information on the extent to which they, the defendants, have committed the acts referred to in Section I.1 since April 13, 2023 in the Federal Republic of Germany, stating

(1) the names and addresses of manufacturers, suppliers and other previous owners,

(2) the names and addresses of the professional customers and the points of sale for which the products were intended,

(3) the quantity of products delivered, received or ordered as well as the prices paid for the products concerned, whereby copies of the corresponding proof of purchase (namely invoices, alternatively delivery bills) must be submitted as proof of the information, whereby details requiring confidentiality outside the data subject to disclosure may be blacked out;

3. to provide the plaintiff with a chronologically ordered list of the extent to which the defendants have committed the acts described above under I.1. since April 13, 2023, stating

a) the individual deliveries, broken down by delivery quantities, times, prices and type designations as well as the names and addresses of the customers,

b) the individual offers, broken down by offer quantities, times, prices and type designations as well as the names and addresses of the recipients of the offers,

c) the advertising operated, broken down by advertising media, their circulation, distribution period and distribution area and, in the case of Internet advertising, the placement periods, Internet addresses and access figures,

d) the prime costs broken down according to the individual cost factors and the profit generated,

whereby for lit. a) to d) supporting documents (such as outgoing invoices, alternatively delivery bills, offer letters, incoming invoices, alternatively delivery bills) must be submitted, whereby details requiring confidentiality outside the data subject to invoicing may be blacked out; and whereby the defendants reserve the right, at their discretion, to disclose the names and addresses of the non-commercial purchasers and the offerees instead of the plaintiff to a sworn auditor based in the Federal Republic of Germany who is to be designated by the plaintiff and who is bound to secrecy towards the plaintiff, provided that the defendants bear the auditor's costs and authorize and oblige him to inform the plaintiff, upon specific request, whether a particular delivery or a particular purchaser or offeree is included in the list;

4. to recall the products referred to in Section 1.1. above that have been in the possession of commercial customers since April 13, 2023;

5. only the defendant 2): to destroy the products in the Federal Republic of Germany in the direct or indirect possession or ownership of the defendant 2) in accordance with Section 1.1. or to hand them over to a bailiff to be instructed by the plaintiff for the purpose of destruction at the expense of the defendant 2);

II. it is established that the defendants are obliged to compensate the plaintiff as joint and several debtors for all damage that the plaintiff has suffered and will suffer as a result of the acts referred to in Section 1.1. committed since April 13, 2023.

III. The defendants are ordered to pay the costs of the proceedings jointly and severally.

IV. The judgment is provisionally enforceable in Sections I.1., I.4. and I.5. against security in the amount of EUR 4 million, in Sections I.2. and I.3. against security in the amount of EUR 50,000.00 and in Section III. against security in the amount of 110 percent of the amount to be enforced in each case.

## **Facts of the case**

1

The plaintiff claims against the defendants for alleged infringement of the German part of EP 3 295 571.

2

The plaintiff is the proprietor of European patent 3 295 571 (Exhibit ... 1, German translation Exhibit ... 2, hereinafter patent in suit) entitled "Pilot transmission and reception for orthogonal frequency division multiple access". The patent in suit was filed on May 9, 2016, claiming priority US 201562/159187 P dated May 8, 2015. The notice of grant was published on September 8, 2021. On September 8, 2023, the defendant 2) filed a nullity action with the Federal Patent Court (file no. ... Exhibit B2). A reference decision pursuant to Section 83(1) PatG has not yet been issued.

3

The asserted claims 1 and 7 read as follows:

Claim 1: "A method of a wireless device for transmitting a frame, the method comprising: providing pilots (e5, e6, e7, e8, e9, e10, e11, e12, e13, e14 - Figures 54A&B) in a resource unit (5408, 5410, 5412, 5424, 5426); and transmitting the frame (400 - Figure 4) including the resource unit, characterized by the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard (408-2X), wherein when a lowest subcarrier of the resource unit has an odd index (5412, 5426), a plurality of pilots are included at a first set of positions (e11, e12, e13, e14) in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index (5408, 5424), a plurality of pilots are included at a second set of positions (e5, e6, e7, e8) in the resource unit, respectively, wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers (430, 432) of the symbols of the 2X High Efficiency Long Training Field, and wherein when the resource unit is a 52-subcarrier resource unit (5424, 5426): the first set of positions include a first pilot tone position (5426, e11) spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position (e12) separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position (e13) separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position (e14) separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position (5422, e5) spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position (e6) separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position (e7) separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position (e8) separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit."

Claim 7: "A method of a wireless device for receiving a frame, the method comprising: receiving the frame (400 - Figure 4) including a resource unit (5408, 5412, 5424, 5426 - Figure 54A&B) including pilots (e7 to e11); and processing the pilots, characterized in that the frame includes a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard (408-2X), wherein when a lowest subcarrier of the resource unit has an odd index (5412, 5426), a plurality of pilots are included at a first set of positions (e11, e12, e13, e14) in the resource unit, respectively, when a lowest subcarrier of the resource unit has even index (5408, 5424), a plurality of pilots are included at a second set of positions (e5, e6, e7, e8) in the resource unit, respectively, and wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, and wherein when the resource unit is a 52-subcarrier resource unit (5424, 5426): the first set of positions include a first pilot tone position (5426, e11) spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position (e12) separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position (e13) separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position (e14) separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position (5422, e5) spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position (e6) separated by thirteen subcarriers from the fifth pilot tone

position, a seventh pilot tone position (e7) separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position (e8) separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit."

**4**

The plaintiff is a patent exploiter. The patent in suit and the other patents held by the plaintiff and its parent company relate to inventions made at ... in the development of improvements to WiFi technology. The inventions have been incorporated into the WiFi 6 standard, IEEE (Institute of Electrical and Electronics Engineers) 802.11ax standard (hereinafter: WiFi 6).

**5**

Defendant 1) is a manufacturer of end devices for wireless networks (routers, network adapters, etc.). The end devices it manufactures and sells can communicate according to the WiFi 6 standard. Defendant 1) advertises and distributes its end devices worldwide under the brand name "...". Defendant 2), as the German distribution company, is involved in the sale of the ... of defendant 1) in Germany.

**6**

In the present complaint, the plaintiff is challenging the offering and marketing of the WiFi 6-capable terminal devices marketed by the defendants in the Federal Republic of Germany under the trademark "...". The forms of infringement are access points and simple stations, such as the WLAN routers "... and ..." as well as the WiFi 6 WLAN network card "...".

**7**

The parties have so far negotiated unsuccessfully about licensing the plaintiff's patent portfolio, which includes the patent in suit.

**8**

*The plaintiff submits that* the contested embodiments infringe claims 1 and 7 of the patent in suit indirectly and literally, since the WiFi 6 standard implements the teaching of the patent in suit.

**9**

Security for legal costs was not to be provided as the plaintiff was a German GmbH and the scope of application of Section 110 Code of Civil Procedure (ZPO) was not opened.

**10**

The defendant's objection to compulsory licensing under antitrust law does not apply due to its obvious unwillingness to license.

**11**

The infringement proceedings were not to be suspended due to the validity of the patent in suit; the defendant's attacks on the validity of the patent were irrelevant.

**12**

*Lastly, the plaintiff claims that the Court should:*

I. order defendants,

1. subject to a fine of up to EUR 250,000 for each case of non-compliance, alternatively imprisonment for up to 6 months or imprisonment for up to 6 months, in the event of a repeat offense imprisonment for up to 2 years, whereby the imprisonment is to be enforced on the respective managing director of the defendants,

to refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany, i.e.,

(a) wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

Providing pilots in a resource unit; and transmitting the frame including the resource unit, wherein the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, and wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position tone separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(indirect patent infringement of claim 1 of EP 3 295 571 B1)

alternatively to a)

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[1a] wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

Providing pilots in a resource unit; and transmitting the frame including the resource unit, wherein the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard and one or more data payloads, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position tone separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position

separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit, and wherein pilot signals are provided for both the 2X High Efficiency Long Training Field and the one or more data payloads;

(Auxiliary request 1a: indirect patent infringement of claim 1 of EP 3 295 571 B1, limited)

in the alternative to [1a]

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[2a] wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

Providing pilots in a resource unit; and transmitting the frame including the resource unit, wherein the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard and one or more data payloads, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position tone separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit, and wherein pilot signals are provided for both the 2X High Efficiency Long Training Field and the one or more data payloads, and wherein the pilot tone positions for the 2X High Efficiency Long Training Field are the same as the pilot tone positions for the one or more data payloads;

(Auxiliary request 2a: indirect patent infringement of claim 1 of EP 3 295 571 B1, further limited)

in the alternative to [2a]

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[3a] wireless devices suitable to be used for performing a method for transmitting a frame, the method comprising: Providing pilots in a resource unit; and transmitting the frame including the resource unit, wherein the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations

of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein for a given operating bandwidth, pilot tone positions for a resource unit having a larger number of subcarriers are physically aligned with pilot tone positions for a resource unit having a smaller number of subcarriers, and wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions include a fifth pilot tone position spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(auxiliary request 3a: indirect patent infringement of claim 1 of EP 3 295 571 B1, limited)

in the alternative to [3a]

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[4a] wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

Providing pilots in a resource unit and transmitting the frame including the resource unit, the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, wherein the second set of positions being different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein the resource unit is a 26-subcarrier resource unit, a 52-subcarrier resource unit, a 106-subcarrier resource unit or a 242-subcarrier resource unit, wherein each of the 52-subcarrier resource unit, the 106-subcarrier resource unit and the 242-subcarrier resource unit has pilot tone positions selected from the pilot tone positions used by the resource units with fewer subcarriers occupying the same bandwidth, and wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions includes a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated from the first pilot tone position by thirteen subcarriers, a third pilot tone position separated from the second pilot tone position by eleven subcarriers, and a fourth pilot tone position separated from the third pilot tone position by thirteen subcarriers and including six subcarriers from a lowest-indexed subcarrier of the resource unit, separated from the second pilot tone position by eleven subcarriers, and a fourth pilot tone position separated from the third pilot tone position by thirteen subcarriers and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions includes a fifth pilot tone position which is spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position which is separated from the fifth pilot tone position by thirteen subcarriers, a seventh pilot tone position which is separated from the sixth pilot tone position by eleven subcarriers, and an

eighth pilot tone position which is separated from the seventh pilot tone position by thirteen subcarriers and which is spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(auxiliary request 4a: indirect patent infringement of claim 1 of EP 3 295 571 B1, limited)

and/or

b) refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

wireless devices capable of being used to perform a method for receiving a frame,

wherein the method comprises:

receiving the frame including a resource unit including pilots; and processing the pilots, the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are each included in a first set of positions in the resource unit, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are each included in a second set of positions in the resource unit, and wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, and wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions include a first pilot tone position spaced five subcarriers away from the lowest index subcarrier of the resource unit, a second pilot tone position separated from the first pilot tone position by thirteen subcarriers, a third pilot tone position separated from the second pilot tone position by eleven subcarriers, and a fourth pilot tone position separated from the third pilot tone position by thirteen subcarriers and including six subcarriers separated from the lowest index subcarrier of the resource unit, separated from the second pilot tone position by eleven subcarriers, and a fourth pilot tone position separated from the third pilot tone position by thirteen subcarriers and spaced six subcarriers from a highest-indexed subcarrier of the resource unit, and the second set of positions includes a fifth pilot tone position which is spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position which is separated from the fifth pilot tone position by thirteen subcarriers, a seventh pilot tone position which is separated from the sixth pilot tone position by eleven subcarriers, and an eighth pilot tone position which is separated from the seventh pilot tone position by thirteen subcarriers and which is spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(indirect patent infringement of claim 7 of EP 3 295 571 B1)

alternatively to b)

to refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[1b] wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

receiving the frame including a resource unit including pilots; and processing the pilots, wherein the frame includes a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard and one or more data payloads, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included in a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included in a second set of positions in the resource unit, respectively, and wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions includes a first pilot tone

position spaced five subcarriers from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, separated from the second pilot tone position by eleven subcarriers, and a fourth pilot tone position separated from the third pilot tone position by thirteen subcarriers and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions includes a fifth pilot tone position, spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position, separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit, and wherein pilot signals are provided for both the 2X High Efficiency Long Training Field and the one or more data payloads;

(Auxiliary request 1b: indirect patent infringement of claim 7 of EP 3 295 571 B1, limited)

alternatively to [1b]

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[2b] wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

receiving the frame including a resource unit including pilots; and processing the pilots, wherein the frame includes a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard and one or more data payloads, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included in a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included in a second set of positions in the resource unit, respectively, and wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein when the resource unit is a 52-subcarrier resource unit: the first set of positions includes a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions includes a fifth pilot tone position which is spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position separated by thirteen subcarriers from the seventh pilot tone position and spaced five subcarriers away from a highest-indexed subcarrier of the resource unit, and wherein pilot signals are provided for both the 2X High Efficiency Long Training Field and the one or more data payloads, the pilot tone positions for the 2X High Efficiency Long Training Field being the same as the pilot tone positions for the one or more data payloads;

(Auxiliary request 2b: indirect patent infringement of claim 7 of EP 3 295 571 B1, further limited)

alternatively to [2b]

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[3b] wireless devices suitable to be used for performing a method for transmitting a frame,

the method comprising receiving the frame including a resource unit including pilots; and processing the pilots, the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, and wherein the second set of positions is different from the first set of positions, wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to the locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein, for a given operating bandwidth, pilot tone positions for resource unit having a larger number of subcarriers are physically aligned with pilot tone positions for resource unit having a smaller number of subcarriers, wherein if the resource unit is a 52-subcarrier resource unit: the first set of positions includes a first pilot tone position spaced five subcarriers away from a lowest-indexed subcarrier of the resource unit, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed subcarrier of the resource unit, and the second set of positions includes a fifth pilot tone position which is spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position which is separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position which is separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position which is separated by thirteen subcarriers from the seventh pilot tone position and which is spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(Auxiliary request 3b: indirect patent infringement of claim 7 of EP 3 295 571 B1, limited)

alternatively to [3b]

refrain from offering and/or supplying the teaching of EP 3 295 571 for use in the Federal Republic of Germany to third parties who are not authorized to use it in the Federal Republic of Germany

[4b] wireless devices capable of being used to perform a method for transmitting a frame,

wherein the method comprises:

receiving the frame including a resource unit including pilots; and processing the pilots, the frame including a 2X High Efficiency Long Training Field of an IEEE 802.11ax standard, wherein when a lowest subcarrier of the resource unit has an odd index, a plurality of pilots are included at a first set of positions in the resource unit, respectively, wherein when a lowest subcarrier of the resource unit has an even index, a plurality of pilots are included at a second set of positions in the resource unit, respectively, a plurality of pilots are each included in a second set of positions in the resource unit, and wherein the second set of positions is different from the first set of positions, the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field, wherein the second set of positions respectively correspond to locations of the non-null subcarriers of the symbols of the 2X High Efficiency Long Training Field, wherein the resource unit is a 26-subcarrier resource unit, a 52-subcarrier resource unit, a 106-subcarrier resource unit or a 242-subcarrier resource unit, wherein each of the 52-subcarrier resource unit, the 106-subcarrier resource unit and the 242-subcarrier resource unit includes pilot tone positions selected from the pilot tone positions used by the resource units with fewer

subcarriers occupying the same bandwidth, and wherein, when the resource unit is a 52-subcarrier resource unit: the first set of positions being a first pilot tone position spaced five subcarriers away from a lowest-indexed resource unit subcarrier, a second pilot tone position separated by thirteen subcarriers from the first pilot tone position, a third pilot tone position, separated by eleven subcarriers from the second pilot tone position, and a fourth pilot tone position separated by thirteen subcarriers from the third pilot tone position and spaced six subcarriers away from a highest-indexed resource unit subcarrier, and the second set of positions includes a fifth pilot tone position which is spaced six subcarriers away from a lowest-indexed subcarrier of the resource unit, a sixth pilot tone position which is separated by thirteen subcarriers from the fifth pilot tone position, a seventh pilot tone position which is separated by eleven subcarriers from the sixth pilot tone position, and an eighth pilot tone position which is separated by thirteen subcarriers from the seventh pilot tone position and which is spaced five subcarriers away from a highest-indexed subcarrier of the resource unit;

(auxiliary request 4b: indirect patent infringement of claim 7 of EP 3 295 571 B1, limited)

2. to provide the plaintiff with information on the extent to which they, the defendants, have committed the acts referred to in Section I.1 since April 13, 2023 in the Federal Republic of Germany, stating

(1) the names and addresses of manufacturers, suppliers and other previous owners,

(2) the names and addresses of the professional customers and the points of sale for which the products were intended,

(3) the quantity of products delivered, received or ordered as well as the prices paid for the products concerned, whereby copies of the corresponding proof of purchase (namely invoices, alternatively delivery bills) must be submitted as proof of the information, whereby details requiring confidentiality outside the data subject to disclosure may be blacked out;

3. to provide the plaintiff with a chronologically ordered list of the extent to which the defendants have committed the acts described above under I.1. since April 13, 2023, stating

a) the individual deliveries, broken down by delivery quantities, times, prices and type designations as well as the names and addresses of the customers,

b) the individual offers, broken down by offer quantities, times, prices and type designations as well as the names and addresses of the recipients of the offers,

c) the advertising operated, broken down by advertising media, their circulation, distribution period and distribution area and, in the case of Internet advertising, the placement periods, Internet addresses and access figures,

d) the prime costs broken down according to the individual cost factors and the profit generated,

whereby supporting documents (such as outgoing invoices, alternatively delivery bills, offer letters, incoming invoices, alternatively delivery bills) must be submitted for lit. a) to d), whereby details requiring confidentiality outside the data subject to invoicing may be blacked out;

and whereby the defendants reserve the right, at their option, to disclose the names and addresses of the non-commercial purchasers and the offerees instead of the plaintiff to a sworn auditor domiciled in the Federal Republic of Germany, to be designated by the plaintiff and bound to secrecy towards it, provided that the defendants bear his costs and authorize and oblige him to inform the plaintiff, upon specific request, whether a particular delivery or a particular purchaser or offeree is included in the list;

4. to recall the products referred to above in Section 1.1. that have been in the possession of commercial customers since April 13, 2023;

5. only the defendant 2): to destroy the products in the Federal Republic of Germany in the direct or indirect possession or ownership of the defendant 2) in accordance with Section 1.1. or to hand them over to a bailiff to be instructed by the plaintiff for the purpose of destruction at the expense of the defendant 2);

II. declare that the defendants are obliged to compensate the plaintiff as joint and several debtors for all damage that the plaintiff has suffered and will suffer as a result of the acts referred to in Section 1.1. committed since April 13, 2023.

### 13

*The defendants request, that*

1. the complaint is dismissed.
2. in the alternative: The request for injunctive relief is dismissed as currently unfounded.
3. the plaintiff is ordered to pay the costs.
4. in the *further* alternative: The proceedings are stayed until a final decision has been made on the nullity action brought against the patent in suit before the Federal Patent Court (file no. ...).
5. in the alternative, in the event that the complaint is neither dismissed nor the proceedings stayed, to order the provision of security for the provisional enforcement of the claims for injunctive relief, recall and destruction of not less than ...
6. in the further alternative:

(1)(1) The following details of the information and accounting requested by the plaintiff (including the corresponding supporting documents such as invoices or delivery bills) are classified as confidential:

(1.1) Information in accordance with the request under item 1.1. of the complaint on the acts referred to in items 1.1.a) and b) since 24.03.2023, stating

a) the names and addresses of manufacturers, suppliers and other previous owners,

(b) the names and addresses of the professional customers and the 3 points of sale for which the products were intended,

c)c) the quantity of products delivered, received or ordered and the prices paid for the products concerned,

and

(1.2) Accounting in accordance with the request under I.2. of the complaint for the acts described under I.1. a) and b) of the complaint since March 24, 2023, stating

a) the individual deliveries, broken down by delivery quantities, times, prices and type designations as well as the names and addresses of the customers,

b) the individual offers, broken down by offer quantities, times, prices and type designations as well as the names and addresses of the offerees,

c) the advertising operated, broken down by advertising media, their circulation, distribution period and distribution area and, in the case of Internet advertising, the Internet addresses, the placement periods and the access figures,

d)d)d)d) of the prime costs broken down by the individual cost factors and the profit generated.

(2.) The parties are advised that the classification as confidential has the consequence that the parties, their counsel, witnesses, experts, other representatives, all other persons involved in the litigation or who have access to the documents from the proceedings that are classified as confidential, must treat this information as confidential and may not use or disclose it outside these proceedings, outside any enforcement proceedings relating to these proceedings, outside the assessment of the defendant's obligation to pay damages determined therein and outside any subsequent proceedings on the amount of damages, unless they can prove that they have lawfully obtained knowledge of it outside these proceedings, and may not use or disclose it in the context of any other proceedings relating to these proceedings. The defendants may not use or disclose such information outside of these proceedings, outside of any subsequent proceedings for the payment of damages, unless it can be proven that they have lawfully obtained knowledge of such information outside of these proceedings and remain within the scope of any restrictions associated with such other knowledge. This obligation shall continue to apply after the conclusion of these proceedings and any compulsory proceedings. This shall not apply if and to the extent that the existence of a trade secret with regard to the information from the above section is denied by a final judgment, or as soon as the information concerned becomes known or readily accessible to persons in the circles that normally deal with such information, without this being based on a breach of the confidentiality obligation.

In the event of violations of the above obligations, the court may, at the request of a party, impose a fine of up to EUR 100,000.00, or alternatively imprisonment, or imprisonment for up to 6 months and enforce it immediately.

(3.) Third parties who have a right to inspect files may only be provided with file content in which the business secrets have been made unrecognizable in accordance with item 1.

(4.) Access to the information referred to in item 1, insofar as it is submitted in the proceedings, shall be restricted on the plaintiff's side to

(a) three reliable natural persons of the plaintiff, to be nominated by the plaintiff, including:

- the managing director xxx,

b) the attorneys-at-law, patent attorneys and other representatives of the plaintiff involved in the mandate.

*The plaintiff opposes the request for suspension and the requests for confidentiality.*

#### **14**

*The defendants are of the opinion that the plaintiff must provide security for legal costs in accordance with Section 110 Code of Civil Procedure (ZPO), as it is formally a German GmbH, but as a straw-man company has its actual administrative headquarters in the USA. An exceptional case pursuant to Section 110 (2) Code of Civil Procedure (ZPO) does not exist.*

#### **15**

The challenged embodiments did not make indirect and literal use of claims 1 and 7. The WiFi 6 standard provides for a different positioning of the pilot tones than that protected by the patent in suit.

#### **16**

The claim for injunctive relief, recall and destruction is precluded by the objection of compulsory licensing under antitrust law. The defendants believe that the plaintiff is unwilling to license, while they themselves have done everything necessary to conclude a license agreement on FRAND terms.

#### **17**

Finally, a conviction of the defendant is ruled out because the proceedings must be suspended due to the nullity proceedings before the Federal Patent Court pursuant to Section 148 Code of Civil Procedure (ZPO). The patent in suit does not effectively claim the priority of the application US 2015 621 59187 (Exhibit NK5), so that the citations NK6, NK9 and NK10 are prejudicial to the novelty of the patent in suit. The legal validity fails due to the lack of inventive step with regard to the combination of citations NK11 and NK12 or NK13. Furthermore, the subject matter of the patent in suit was inadmissibly extended compared to the original application. Moreover, the invention was not disclosed in an embodiment.

**18**

*For the rest*, reference is made to the parties' writs and Exhibits as well as the minutes of the oral hearing on May 2, 2024.

### **Reasons for the decision**

**19**

The admissible complaint is justified. According to a correct interpretation of the features of the patent in suit at issue between the parties, the challenged embodiments make use of the teaching of the patent in suit in accordance with the wording (B. II The FRAND objection raised by the defendants does not apply. The proceedings are not to be stayed.

A.

**20**

The plaintiff is not obliged to provide security for legal costs pursuant to Section 110 (1) Code of Civil Procedure (ZPO) as it is a domestic GmbH. The defendant has not provided sufficient evidence to suggest that the plaintiff is merely a straw-man company whose affairs are managed from abroad. The fact that the sole managing director of the plaintiff is a lawyer who is appointed as managing director for several companies is not sufficient. Consequently, this submission was not further substantiated by the defendant at the oral hearing.

B.

**21**

I. The patent in suit deals with the transmission and reception of OFDMA frames containing pilot tone signals in the form of pilot tones.

**22**

Pilots or pilot subcarriers are used to estimate the channel and determine the carrier frequency offset ("CFO"). The meaning and function of the pilots are undisputed between the parties. The patent in suit deals only with a technically advantageous arrangement of the pilot tones and adds no further development to their specific design.

**23**

1. With regard to the prior art, the patent in suit explains that the requirements placed on wireless networks ("Wireless Local Area Networks", "WLANs" for short) have steadily increased. Users are therefore interested in improving the performance and efficiency of wireless networks. In addition, there is a need to reduce the energy consumption of the devices used in a wireless network (see para. [0002]).

**24**

The highly efficient wireless networks ("HE WLANs") developed as part of the IEEE 802.11ax standard used OFDMA technology (short for "orthogonal frequency-division multiple access"), which enables the access points in an HE WLAN to communicate simultaneously with several users and thus make better use of the available bandwidth (see paragraphs [0004], [0005]).

**25**

Instead of sending data at high speed via a single (wide) channel, OFDMA divides the data stream into many data streams and transmits them simultaneously via a large number of narrower channels, so-called subcarriers. A subcarrier therefore refers to a section of the total bandwidth, which corresponds to a partial signal over which information can be sent.

**26**

This configuration makes it possible to react more flexibly to special features of a transmission channel. In the event of interference that only affects a narrow area of the frequency spectrum, the subcarriers affected by the interference could be temporarily excluded from transmission. Data could continue to be transmitted on the other subcarriers so that the overall data transmission rate would only drop slightly. Destructive interference due to multipath reception would also have less of an impact because only individual subcarriers would be affected.

**27**

The total available bandwidth of a channel within an HE-WLAN can vary. The patent in suit cites bandwidths of 20, 40, 80, 80 + 80 and 160 MHz as examples (see para. [0061]). For example, a bandwidth of 20 MHz could be divided into 256 subcarriers.

**28**

With OFDMA, several subcarriers would be combined into a superordinate unit, a so-called Resource Unit ("RU") (see para. [0005]). Groups of subcarriers would be assigned to the individual users in this way.

**29**

The data that would be sent over the entire channel bandwidth in a certain period of time, i.e. across all simultaneously sent resource units, formed a "frame".

**30**

Some subcarriers are also used as "pilot subcarriers". These are used for channel estimation and to determine the CFO, i.e. the carrier frequency offset (see para. [0008]).

**31**

When a signal passes through a channel, it is distorted by noise or other signals passing through the same medium. When it arrives at its destination, the signal may therefore exhibit errors. In order to remove such noise and distortion effects (CFO) from the received signal, the characteristics of the channel must be known. The process of determining the channel characteristics is known as channel estimation. Pilots in the form of pilot tones for channel estimation could be included in so-called "Long Training Fields" ("LTF") (see para. [0008]).

**32**

To improve the CFO determination, the pilots in all symbols of the frame should be evenly distributed over the available total bandwidth. The positioning of the pilot tones in the individual symbols of a frame can vary in principle (see para. [0010])

**33**

2. The patent application US2010/0002787 A1 is cited as prior art. The patent application describes that the pilots are arranged in such a way that there is an even number of subcarriers between the pilots, in particular four or six subcarriers (para. [0011]). Patent application US 2012/0320836 A1 is also cited, which proposes that each resource unit should contain at least one pilots.

**34**

3. Without explicitly criticizing the prior art, the patent in suit sets itself the objectively determinable task of providing a technically advantageous distribution of pilot tones.

**35**

4. as a solution, the patent in suit presents the asserted claims 1 and 7, which, according to the parties' concurring submissions, can be structured as follows:

*Claim 1*

1. a method of a wireless device for transmitting a frame, the method comprising:
  - 1.1 Providing pilots (e5, e6, e7, e8, e9, e10, e11, e12, e13, e14 - Fig. 54A and B) in a resource unit (5408, 5410, 5412, 5424, 5426); and
  - 1.2 transmitting the frame (400 - Fig. 4) including the resource unit,
  - 1.3 wherein the frame including a 2X High Efficiency Long Range Training Field (408-2X) of an IEEE 802.11ax standard,
  - 1.4 wherein when a lowest subcarrier of the resource unit has an odd index (5412, 5426), a plurality of pilots are included at a first set of positions (e11, e12, e13, e14) in the resource unit, respectively,
  - 1.5 wherein when a lowest subcarrier of the resource unit has an even index (5408, 5424), a plurality of pilots are included at a second set of positions (e5, e6, e7, e8) in the resource unit, respectively
  - 1.6 wherein the second set of positions is different from the first set of positions,

- 1.7 wherein the first set of positions respectively correspond to locations of non-null subcarriers of symbols of the 2X High Efficiency Long Training Field,
- 1.8 wherein the second set of positions respectively correspond to locations of non-null subcarriers (430, 432) of symbols of the 2X High Efficiency Long Training Field, and
- 1.9 wherein when the resource unit is a 52-subcarrier resource unit (5424, 5426):
  - 1.9.1 the first set of positions include
    - 1.9.1.1 a first pilot tone position (5426, e11) spaced five subcarriers *away* from a lowest-indexed subcarrier of the resource unit,
    - 1.9.1.2 a second pilot tone position (e12) *separated* by thirteen subcarriers from the first pilot tone position,
    - 1.9.1.3 a third pilot tone position (e13) *separated* by eleven subcarriers from the second pilot tone position, and
    - 1.9.1.4 a fourth pilot tone position (e14) *separated* by thirteen subcarriers from the third pilot tone position and spaced six subcarriers *away* from a highest-indexed subcarrier of the resource unit,
  - 1.9.2 and the second set of positions contains
    - 1.9.2.1 a fifth pilot tone position (5422, e5) spaced six subcarriers *away* from a lowest-indexed subcarrier of the resource unit,
    - 1.9.2.2 a sixth pilot tone position (e6) *separated* by thirteen subcarriers from the fifth pilot tone position,
    - 1.9.2.3 a seventh pilot tone position (e7) *separated* by eleven subcarriers from the sixth pilot tone position, and
    - 1.9.2.4 an eighth pilot tone position (e8) *separated* by thirteen subcarriers from the seventh pilot tone position and which is five subcarriers *away* from a highest-indexed subcarrier of the resource.

### 36

Claim 7 is structured according to claim 1 and relates to receiving a frame according to the patent.

### 37

II. 1 The technical teaching protected by the patent in suit must be determined from the point of view of the average person skilled in the art, a graduate engineer in communications engineering with a university degree and several years of professional experience in the design and development of wireless radio technology, from the features of claims 1 and 7 of the patent in suit in detail and in their entirety, taking into account the description and the drawings.

### 38

2. The only question in dispute is how the term "spaced away" referred to in features 1.9.1.1, 1.9.1.4, 1.9.2.1 and 1.9.2.4 and the term "spaced" referred to in features 1.9.1.2, 1.9.1.3, 1.9.1.4 and 1.9.2.2, 1.9.2.3 and 1.9.2.4 is to be interpreted as "separated". The following explanations are required:

### 39

a. Feature group 1.9 represents the core of the invention and deals with the specific arrangement of the pilot tones in a resource unit with 52 subcarriers. The distance of the two outer pilot tones from the edge of the resource unit ("spaced away") and the distance of the pilot tones from each other within the resource unit ("separated by") are defined.

### 40

The terms "spaced away" and "separated by" according to feature group 1.9 have different meanings. When determining the meaning of certain features, the principle that different terms in a patent should have different meanings must be taken into account (see Federal Supreme Court (BGH), GRUR 1999, 909 - Spanschraube). Only in exceptional cases can it be assumed that two different terms are intended to have the same meaning. However, such an exceptional case does not exist in the present case.

### 41

The term "spaced away" (or "spaced" in the German version of the claim) requires that a certain value is added to a subcarrier index. For example, if the initial subcarrier has the index 2, the subcarrier spaced away by x has the index 2+x.

### 42

"Separated by", on the other hand, means that there must be a certain number  $x$  of subcarriers between two subcarrier indices. For example, the subcarrier with the index 2 is "separated by" or "separated by"  $x$  subcarriers from the subcarrier with the index  $2+x+1$ .

#### 43

Claim 1 of the patent in suit also does not use the two terms synonymously, but makes a precise distinction when using the terms as to whether the *distance of the two outer pilot tones from the edge of the resource unit* is meant - in which case the patent in suit uses "spaced away" - or whether the distance of the pilot tones *from each other within the resource unit* is meant - in which case the wording is "separated by".

#### 44

b. This interpretation is supported by the fact that claim 1 explicitly refers to Figures 54A and 54B described in paragraphs [0343] and [0345]. Figures 54A and 54B indicate exactly on which subcarriers the pilot tones are to be arranged in a claimed 52-subcarrier resource unit. In the following figure 54A, the pilot tone positions e1 to e18 are shown as arrows. The claimed 52-subcarrier resource units with reference numerals 5422, 5424, 5426 and 5428 are marked by a red box (emphasized by the claimant).



#### 45

Paragraph [0343] of the description clarifies that the pilot tone positions for the resource units shown in Figure 54A are listed in Table 11 of Figure 54B:



#### 46

This distribution of pilot tone positions only results if the term "spaced away" according to feature group 1.9 means that a certain value is added to a subcarrier index, i.e. the feature is understood as described above.

#### 47

c. Feature 1.9.1.1 refers to the resource unit shown in Figure 54A with reference number 5426.



#### 48

The "lowest-indexed subcarrier of the resource unit" according to feature 1.9.1.1 is the subcarrier with index 17 (see above). According to Table 11 in Figure 54B, the "first pilot tone position" with the reference number e11 is on the subcarrier with index 22 or 24. If the defendant's incorrect understanding of the term "spaced away" according to feature 1.9.1.1 is taken as a basis, the pilot tone position e11 would have to be on the subcarrier with index 23. This would obviously not be consistent with Table 11. According to the correct understanding, according to which the term "spaced away" requires the lower subcarrier index to be added to five, the pilot tone position e11 is on the subcarrier with the index 22 ( $17+5=22$ ). This corresponds to the embodiment example in Figures 54A and 54B. The references and reference signs contained in claims 1 and 7 are thus consistent with the remaining descriptive text of the patent in suit and the technical relationships disclosed herein.

#### 49

III. Taking into account the interpretation of the features 1.9.1.1. to 1.9.1.4. and 1.9.2.1. to 1.9.2.4. at issue between the parties alone, a literal contributory infringement of claim 1 - and thus also of claim 7 of the patent in suit pursuant to Section 10 (1) Patent Act by the challenged embodiments and the WiFi 6 standard must be affirmed.

#### 50

1. The configuration of the challenged devices, WLAN routers and WLAN network cards, is undisputed between the parties to the extent that they are compatible with the WiFi 6 standard and can use the WiFi 6 standard.

**51**

2. The challenged embodiments indirectly and literally realize features 1.9.1.1. to 1.9.1.4. and 1.9.2.1. to 1.9.2.4. of claim 1 of the patent in suit. The other features are rightly not in dispute, because the WiFi 6 standard makes use of them.

**52**

a. The WiFi 6 standard divides the 20 MHz bandwidth into four 52 subcarrier resource units, two of which have an odd lowest subcarrier index (highlighted in yellow below) and two of which have an even subcarrier index (highlighted in pink below, with emphasis in each case following the party to the action):



**53**

The pilot tone positions in the resource units RU1 to RU4 can be seen in the following table 27-39:

*Table 27-39 Pilot indices for 52-tone RU transmission*



**54**

In the resource units RU1 and RU3 highlighted in yellow with an odd lowest subcarrier, the pilot signals are arranged according to feature group 1.9.1. In RU1 from subcarrier - 121 to - 70, this results in the pilot tone positions -116, -102, -90 and -76 indicated in the above Table 27-39 (the lowest and highest subcarriers are each marked in yellow below, the pilot tone positions are marked in red, for illustrations see p. 46 et seq. of the application). Sheet 46 et seq. of the statement of claim):



**55**

In the RU3 of subcarriers 17 to 68, this results in the pilot tone positions 22, 36, 48 and 62 shown in Tables 27-39 above:



**56**

In the resource units RU2 and RU4 highlighted in pink with an even lowest subcarrier, the pilots are arranged according to feature group 1.9.2. In RU2 from subcarrier -68 to -17, this results in the pilot tone positions -62, -48, 36 and -22 shown in the above Table 27-39:



**57**

In the RU4 of subcarriers 70 to 121, this results in the pilot tone positions 76, 90, 102 and 116 shown in Tables 27-39 above:



**58**

b. It is thus exactly the arrangement listed in Figure 54B of the patent in suit. The defendant's only non-infringement argument is based on its interpretation of feature group 1.9.1 and 1.9.2, which the court cannot follow for the reasons stated above.

**59**

(3) Claim 7 corresponds to claim 1 except that it relates to receiving a frame instead of transmitting. Since both APs and simple STAs send claimable frames, both can also receive claimable frames. Claim 7 is therefore realized.

**60**

IV. The offering and supplying of the infringing embodiments by the defendants indirectly infringes claims 1 and 7 of the patent in suit. The infringing embodiments realize claims 1 and 7 during operation and are thus suitable for using the invention. They are also a means relating to an essential element of the invention, since they perform all the method steps according to the claims. Defendants have configured and programmed the infringing embodiments to infringe claims 1 and 7, and they also expressly advertise the infringing forms as "WiFi 6"-enabled. Accordingly, they know that the challenged embodiments are suitable and intended to be used for the use of the invention according to claims 1 and 7.

**61**

V. Since the other requirements for a patent infringement are rightly not disputed between the parties, the plaintiff is entitled to the adjudicated claims.

**62**

1. The defendants are obliged to refrain from the patent infringing and unlawful acts of use, Art. 64 (1), (3) EPC in conjunction with Section 139 (1) sentence 1 PatG.

**63**

a. With regard to the challenged embodiments, there is a risk of repetition in view of the undisputed acts of infringement. The risk of repetition is indicated by the unlawful acts of use (to the extent specified). The defendants have not issued a declaration to cease and desist with a penalty clause.

**64**

b. A prohibition for the worse is also justified in the case of indirect patent infringement. The challenged means can only be used in a technically and economically reasonable manner in a patent infringing way. In any case, the defendants have not demonstrated any patent-free use.

**65**

2. The declared claim for information and rendering of accounts follows from Art. 64 (1) EPC, Section 140 b (1), (3) PatG, Sections 242, 259 German Civil Code (BGB).

**66**

3. The claims against the defendants for recall of the infringing forms and their destruction arise to the extent tenorized from Art. 64 para. 1 EPC, Secs. 139, 140 a para. 1 and 3 PatG

**67**

4. Since the defendants committed the acts of infringement according to item I. 1. at least negligently, they are liable for damages for the reasons set out in Art. 64 (1), (3) EPC, Section 139 (2) PatG.

**68**

Accordingly, the defendants were to be sentenced as tenorized pursuant to Art. 64 (1), (3) EPC, Sections 139 (1) sentence 1, (2), 140a (1), (2), 140b (1), (3) PatG, Sections 242, 259 German Civil Code (BGB), Section 256 Code of Civil Procedure (ZPO)).

**69**

5. There was no need to decide on the auxiliary requests, as the main request had already been granted.

C.

**70**

The defendant's objection to compulsory licensing under antitrust law is open due to the plaintiff's dominant market position. However, the plaintiff has not abused its dominant market position because it has in any case submitted a contract offer that does not obviously contradict the FRAND principles, while the defendants have proven to be unwilling to license.

## 71

I. A dominant patent owner who has undertaken vis-à-vis a standardization organization to grant licenses on FRAND terms cannot only abuse its market power by refusing to conclude a corresponding license agreement with an infringer willing to license and by bringing a complaint against it for injunctive relief, recall and removal of products from the distribution channels or for destruction of infringing products. Rather, an abuse may also exist if the patent owner is to be blamed for not having made sufficient efforts to live up to its special responsibility associated with its dominant market position and to make it possible for an infringer who is in principle willing to license to conclude a license agreement on reasonable terms (Federal Supreme Court BGH, judgment of November 24, 2020 - KZR 35/17 - FRAND-Einwand II, GRUR 2021, 585 para. 53 with further references).

## 72

In both cases, the complaint is abusive because - and only because - the infringer willing to license is entitled to a claim that the patent owner contractually permits the infringer to use the protected technical teaching on FRAND terms. The abuse of market power therefore only follows from the refusal of a requested access to the invention per se or from unreasonable conditions for a requested access, from which the patent owner is not prepared to relinquish even at the end of negotiations, i.e. the refusal, to offer the licensee seeking to conclude a license agreement on FRAND terms as a result of a negotiation process those fair, reasonable and non-discriminatory contractual terms which the licensee can claim and on which the licensee in turn is prepared to conclude a contract with the patent owner (Federal Supreme Court BGH, loc. cit. loc. cit, para. 54).

## 73

1) In order to assess whether the conduct of the license seeker expresses a willingness to license or serves to delay the conclusion of a license agreement on FRAND terms, it is important whether the infringer purposefully participates in the license negotiations. This cooperation is the indispensable counterpart to the fact that the patent proprietor is required to accept the infringement of the patent in suit as long as the infringer, for itself, undertakes the efforts required and possible and reasonable for it under the given circumstances to conclude a license agreement on FRAND terms in order to be able to continue to use the patent teaching on this basis. In assessing whether the party has taken the necessary, possible and reasonable measures, the decisive factor is what a reasonable party interested in the successful conclusion of the negotiations in the interests of both parties would do to actively promote this goal at a certain stage of the negotiations (Federal Supreme Court BGH, loc. cit., para. 57).

## 74

The assessment to be made on the basis of objective aspects as to whether a delaying tactic is being pursued must also take into account the infringer's further conduct in response to a notice of infringement or an offer by the patent proprietor (Federal Supreme Court, loc. cit., para. 77). A bona fide license seeker willing to take a license is not interested in postponing taking a license as far as possible in order to bridge the period until the expiry of the patent in suit or to avoid being charged license fees for as long as possible. Rather, its interest is to obtain a license as quickly as possible in order to shorten the period in which it uses the patent in suit or the patent portfolio with the patent in suit without authorization, but in any case without paying remuneration (Higher Regional Court Karlsruhe, judgment of February 2, 2022 - 6 U 149/20 -, juris). The infringer's willingness to license is still relevant even if the patent proprietor has submitted a license offer to the infringer (Federal Supreme Court, loc. cit., para. 69), because the patent proprietor's offer is not the end point but the starting point of the license negotiations (Federal Supreme Court, loc. cit., para. 70).

## 75

A delaying tactic leading to the exclusion of the compulsory license objection under antitrust law is also given in accordance with the statements of the European Court of Justice if a patent infringer does not provide security. In its judgment of 16 July 2015 (**ECJ** GRUR 2015, 764 para. 67 = WRP 2015, 1080 - Huawei/ZTE), the European Court of Justice stated that if a patent infringer uses the SEP before a license agreement has been concluded, it must, from the time its counter-offer is rejected, provide adequate security in accordance with accepted commercial practice in the relevant field, for example by providing a

bank guarantee or depositing the required amounts. The calculation of this security must include, inter alia, the number of past acts of use in relation to the SEP for which the alleged infringer must be able to provide an accounting.

#### **76**

2. The license seeker is only completely released from the obligation to react and thus also from the obligation to name all obvious objections at the same time in the event that an offer is FRAND-inconsistent to such an extent that, when objectively assessed, it is not meant seriously and thus constitutes a refusal to conclude a license agreement on FRAND terms (see Federal Supreme Court BGH, judgment of 24.11.2020 - KZR 35/17 - FRAND-Einwand II, para. 71). However, it is not sufficient in all cases that an individual clause of an offer is obviously FRAND-inconsistent, even if the entire offer may not appear FRAND, but rather an overall assessment of all the circumstances at hand is required (Higher Regional Court of Karlsruhe, judgment of February 2, 2022 - 6 U 149/20 -, juris).

#### **77**

3. The burden of presentation and proof for the abuse of market power by the patent owner lies with the defendants (see Federal Supreme Court GRUR 2009, 694 (697) - Orange-Book-Standard).

#### **78**

II. The scope of application of Art. 102 TFEU is open, since the plaintiff has a dominant position on the licensing market with regard to the standard-essential patent in suit.

#### **79**

This position follows from the fact that the use of the patent-protected teaching is necessary for the implementation of the standard set by the respective standardization organization and that it is technically impossible to replace the technical invention on which the patent in suit is based with another invention. There is no indication that the technical teaching of the patent in suit can be substituted by another - equivalent - design.

#### **80**

III. The plaintiff did not abuse its dominant market position at any time. Rather, the negotiations conducted between the parties and the offers exchanged for the conclusion of a license agreement show that, measured against the principles set out for FRAND-compliant conduct by the parties, the defendants have failed to do so.

#### **81**

1. There was a dispute between the parties as to whether the defendants had been sufficiently informed of the patent infringement before the action was brought. This is already irrelevant for the decision because the required notice of infringement is to be seen at least in the filing of the action in these proceedings. This is because the complaint was originally only directed at information, rendering of accounts and damages. Only with the extension of complaint in the writ of ... the claims for injunctive relief, recall and destruction were also introduced into these proceedings. With this staged filing of an action, the requirements of the ECJ were satisfied according to the recognized view.

#### **82**

In addition, sufficient notice of infringement had already been given in advance. ... namely notified the ... of the possibility of taking a license to its WiFi 6 standard-essential patent portfolio. This notification sufficiently drew attention to the infringement and the possibility and necessity of taking a license. In this respect, it is sufficient that the patent is designated and the specific act of infringement is indicated. The latter requires the designation of the type of infringing act as well as the challenged embodiments. Detailed technical or legal explanations of the infringement allegation are not required; the infringer must only be put in a position to form a picture of the justification of the patent infringement allegation - if necessary with the help of an expert or by obtaining legal advice (see Federal Supreme Court BGH, WRP 2020, 1194 para. 86 seq. - FRAND-Einwand).

#### **83**

2. The defendant did not respond to the letter of ... . The ... then brought a patent infringement action before the United States District Court for the Eastern District of Texas ("ED Texas") in November 2021. In the proceedings there, the defendant was sentenced in a jury trial on September 14, 2023 (Exhibit ...\_KAR\_7)

to pay damages based on a FRAND license fee in the amount of ... . The judgment of the jury was confirmed by the "Final Judgment" (Exhibit ...\_KAR\_8) of the United States District Court for the Eastern District of Texas ("ED Texas"), with which the first instance was concluded, on December 13, 2023. The defendant appealed against this decision.

**84**

3 At the same time, out-of-court license negotiations were held between the parties. In ... the plaintiff's US attorneys disclosed the plaintiff's license agreements existing at that time to the defendant in the context of the pending US litigation and sent a patent list of the plaintiff's portfolio. The submission of the plaintiff's existing license agreements and the explanation of the same were initially subject to an "attorneys-eyes-only" restriction. From ... access to the statements submitted on the license agreements was extended to two "in-house" persons in each case.

**85**

a. The first offers exchanged between the parties were made verbally or by telephone. ....

**86**

Further oral offers were made by the plaintiff at ....

**87**

The defendant's further oral counter-offers were made on ... . The first written counter-offer is dated ... and is for a lump sum of ... or ... as an ongoing license fee for all US Wifi 6 products (excluding WiFi 7 or WiFi 8). The defendant's offers were limited to a license for the US patents until the filing of the action in the present proceedings.

**88**

b. On ... the ... offer from the plaintiff (Exhibit ... KAR 3) followed. This contained the offer of a blanket license ... for the plaintiff's worldwide patent portfolio until the end of the patent term in 2036 or ... ongoing license fees .... The plaintiff justified the significantly increased total amount primarily with a significantly increased number of units, which it had to base its calculations on after gaining new knowledge. With this offer, the plaintiff assumed expected sales of ... . On the basis of the ... the plaintiff offered various discounts in the letter, namely volume discounts, a discount depending on the status of the legal proceedings, an "early adopter" discount and a "fully paid up" discount. Applying all discounts, the plaintiff thus offered ....

**89**

The defendant submitted on ... for a worldwide license to the plaintiff's entire patent portfolio. This was rejected by the plaintiff in a letter dated .... An agreement has also not been reached in the meantime.

**90**

4. The Chamber is convinced that the defendants lack the necessary willingness to license. For the reasons set out below, the Chamber cannot conclude that the defendants were and are willing to conclude a license agreement on reasonable terms. Rather, it is the defendants' approach to look for points of criticism in all offers that are intended to paint a negative picture of the plaintiff by accumulation. This is obviously intended to push the license fees to be paid into a low range. ....

**91**

a. The lack of willingness to license is already clear from the fact that after the plaintiff's first offer of ..., i.e. it took almost ..., until the defendants submitted a counter-offer, which was also significantly more limited in territorial terms than that offered by the plaintiff. ....

**92**

b. A delaying tactic can also be seen in the fact that the defendants have not yet provided security for any of their counter-offers. The defendants have submitted that, in the event that the plaintiff should reject the ... counteroffer, they would consider providing a corresponding security deposit with a German or European bank in the amount of the ... counter-offer. According to the principles set out above, the defendants should

have expressed their willingness to license by providing security in any case from the first rejected counter-offer, including in Germany. The fact that they did not do so is already sufficient to deny the defendants the protection of the compulsory license defense under antitrust law.

### 93

c. After the multiple exchanges of offer and counter-offer and counter-counter-offer etc. and taking into account the ... the initiation of a license agreement, it would have been time, in accordance with business practice and the principles of good faith, not only to negotiate and formulate interests (i.e. to hold discussions and exchange e-mails), but not only to seek the conclusion of the - allegedly desired - agreement, but also to do everything possible to successfully conclude the license agreement.

### 94

According to these standards, in the present case - also in view of the previous hesitant negotiations on the part of the defendant and the license agreements signed by ... signed license agreements - it would have been up to the defendant to approach the patent owner in a concrete and substantial manner. After all, the patent infringer needs the conclusion of the license agreement in order to put its now intentional, unlawful and commercially infringing actions on a legal basis. However, the defendant failed to do so. The Chamber is aware that, especially in the highly complex field of standard-essential patents, a certain amount of negotiation time is regularly required for a license agreement. However, the fact that over ... during which the plaintiff's WiFi 6 portfolio is deliberately used free of charge by the defendant's group of companies is, in the Chamber's view, an example of a hold-out strategy. It is therefore not relevant in detail that the defendants ... counter-offers - especially since they did not respond to the plaintiff's first offer before and also after the judgment of the court of first instance in Texas ....

### 95

The defendants cannot rely on the fact that the court in Texas is known for regularly awarding excessive license fees. In *Apple v. Wi-LAN* (Exhibit B KAR 6), USD 85.23 million instead of USD 145.1 million was awarded in the second instance, and in *Optis Wireless Technology v. Apple* (Exhibit B KAR 7) USD 300 million instead of over USD 500 million. The license fees awarded in the second instance thus amounted to around 60% of the sums awarded in the first instance, even in the cases cited by the defendants as examples. Applied to the present case, this means that even in the event that the license fees awarded in the judgment of the court in Texas are also reduced in the second instance to 60% of the amount awarded in the first instance, an awarded license fee of approximately ... must be expected. ....

### 96

5. In the absence of the defendant's willingness to license, the plaintiff was therefore not subject to any further duties of conduct. Irrespective of this, the Chamber can determine in the present case that the plaintiff's offers are in any case a suitable starting point for the conclusion of a license agreement between willing license agreement parties within the framework of negotiations. This is shown by a comparison with the contracts submitted by the plaintiff, which the plaintiff has concluded with comparable competitors of the defendant. In this respect, the conditions of the offers in dispute correspond to the conditions of the contracts concluded with comparable competitors. The contractual offers submitted to the defendants by the plaintiff do not constitute a disadvantage to the defendants in violation of antitrust law.

### 97

a. When assessing the plaintiff's license offer, it is irrelevant that the plaintiff is a patent exploiter. Patent law makes no distinction as to whether the patent owner made the invention personally or whether it is a patent acquired for the purpose of exploitation. In the context of a sensible division of labor, it is understandable and beneficial if a separation is made between development and exploitation. This is because innovative forces are only given the opportunity to bring about progress if they are not distracted by exploitation

requirements. There is therefore a legitimate interest, and one that is even worthy of support, in delegating the exploitation of patents to specialized units. The exploitation of patents by companies without their own development activities represents an economically reasonable division of labor that serves to promote innovation. For this reason, the antitrust requirements for NPEs (non-practicing entities) and inventors are identical.

#### **98**

b. The arguments put forward by the defendants in detail against the offers do not work, because they do not show that the offers are unacceptable. Insofar as the defendants argue that the offers do not meet FRAND criteria in all respects, this is not relevant in the present case. The assessment of whether the plaintiff's offer actually meets FRAND criteria is only made if the defendants are actually willing to license. On the other hand, the defendants' willingness to license is only irrelevant if it is already clear from the plaintiff's offer that it is not serious and is tantamount to a refusal by the plaintiff to conclude a license agreement on FRAND terms with the defendant.

#### **99**

c. In order to assess whether an offer made by the patent owner is absolutely unacceptable, the licensing concept offered by the patent owner must be given priority, provided that it is already established on the market, e.g. by the conclusion of several license agreements. In this case, there is a factual presumption for the appropriateness of these license conditions (Kühnen, Hdb. Der Patentverletzung, 6th edition, chapter E para. 603). This presumption is also justified, because the conclusion of comparable license agreements proves that the conditions offered or demanded by the patent owner are accepted in the market and correspond to the value of the patent or patent portfolio reflected in the license fee. At the same time, the conclusion of license agreements means that the patent owner may only deviate from its licensing practice in terms of content if the licensing facts differ. This means that the defendant's argument that the license fee offered by the plaintiff is obviously unFRAND due to the amount of the license fee cannot be accepted, because the plaintiff has submitted comparison license agreements for the WiFi 6 standard ... Settlement license agreements submitted.

#### **100**

d. According to this standard, there is no arbitrary offer by the plaintiff. ....

#### **101**

Even in the event of a possible variance in the patent owner's previous pricing, which does not give rise to such a significant difference in treatment that it cannot be resolved by negotiation between two partners willing to license, a reasonable party interested in the successful conclusion of the negotiations in accordance with its interests would see this circumstance as an opportunity and attempt to (nevertheless) conclude a reasonable, appropriate contract in accordance with its interests. This applies in particular to individual refinements in the figures that only become apparent when the flat fee is calculated. The license rate offered is not arbitrary, as a comparison with the license agreements submitted shows.

#### **102**

On the part of the defendant, the documents submitted by the plaintiff in the parallel proceedings ... were submitted. It is not apparent that the defendants were unreasonably disadvantaged compared to these settlement licenses.

#### **103**

...

#### **104**

As explained, it is not necessary that the agreements reached with the partners to the contracts submitted correspond exactly to the terms offered to the plaintiff. .... It should be generally known that patent infringement proceedings are conducted with very high financial and personnel costs. The administrative costs are also significantly higher in the case of ongoing billing on a per-unit license basis than in the case of a blanket license. From the patent owner's point of view, it can therefore make economic sense to offer considerable discounts for the agreement of a blanket license. In any case, the contracts submitted show

that the plaintiff has an established licensing practice. The plaintiff can choose which license agreements it submits. It is not required, as demanded by the defendants, to submit ... .

#### **105**

e. The negotiation history between the parties does not require a different assessment. .... However, it does not necessarily follow from this that the license rate now demanded is manifestly excessive. This is because a license demand can only be considered unreasonable if it significantly exceeds the hypothetical price that would have been formed in the event of effective competition on the dominated market and there is no economic justification for this pricing (Kühnen, loc. cit., Chapter E, para. 328). The plaintiff has ... in the course of the oral hearing comprehensibly argued that ....

#### **106**

f. The defendant's argument that the offered ... does not take into account that the WiFi 6 portfolio will lose value over time, especially with the introduction of WiFi 7 and WiFi 8, is not convincing on closer inspection. First of all, it should be noted that the previous WiFi versions were always backwards compatible and nothing has been presented or is otherwise apparent that this will change in the future. Furthermore, it cannot be assumed that future WiFi standards will forego the technical achievements of previous standards. It is therefore not apparent that the plaintiff's patent portfolio will lose value. Furthermore, considerable inflation is to be expected by the end of the patent term in 2036, so that the constant license fee, which is not adjusted for inflation ... already results in a de facto reduction in license fees, which should compensate for a possible decline in importance.

#### **107**

6. The time limit requested by the defendants to respond to the plaintiff's writ of April 17, 2024 and its submission at the oral hearing was not to be granted because the submission was not relevant to the decision (see Greger/Zöller, Code of Civil Procedure, 31st ed., Section 283 para. 2a). The defendants' own factual submission alone is not sufficient to justify an unconditional willingness to license, especially since they have not provided security for any offer. In addition, the plaintiff's offer of ... already complied with FRAND conditions, so that the plaintiff's submission from April 17, 2024 onwards cannot have any conceivable effect either in favor of or to the detriment of the defendants.

#### **108**

IV. It is thus clear to the Chamber's satisfaction that the defendants are not necessarily willing to license. It could not be established that the plaintiff has denied the defendants the seriously and unconditionally requested access to the technology protected by the patent in suit. The complaint seeking injunctive relief, recall and destruction is therefore not contrary to antitrust law.

*D.*

#### **109**

There is no reason to stay the proceedings pursuant to Section 148 Code of Civil Procedure (ZPO) due to the nullity action filed by the defendant party against the background of the contract concluded in this regard.

#### **110**

According to established case law of the Chambers of the District Court Munich I (see GRUR-RS 2023, 26656 para. 93; GRUR-RS 2019, 31034 para. 66; GRUR-RS 2019, 31037 para. 63; BeckRS 2018, 41093 para. 147), an opposition or the filing of a nullity action as such do not constitute reasons to suspend the infringement dispute, because this would in fact amount to attributing to the attack on the patent in suit an effect that would inhibit patent protection. However, this is alien to the law. Rather, the interests of the parties must be weighed against each other, with the patent owner's interest in enforcing his granted patent taking precedence. A stay can therefore only be considered if there is an overwhelming probability that the patent in suit will be revoked or destroyed. These requirements are not met in the present case.

#### **111**

In the alternative, the defendants request a stay of the proceedings with regard to the nullity action brought before the Federal Patent Court. They allege an inadmissible extension (I.), lack of practicability (II.), anticipation prejudicial to novelty due to an invalid priority claim (III.) and a lack of inventive step (IV.).

**112**

I. The objection raised by the defendant that the subject-matter of the patent in suit has been impermissibly extended compared to the application as originally filed does not hold water.

**113**

In order to determine an inadmissible extension, the subject matter of the granted patent must be compared with the content of the original documents (Federal Supreme Court (BGH) GRUR 2010, 509 para. 25 - Hubgliedertor I). The subject matter of the patent is the teaching defined by the claims, for the interpretation of which the description and drawings are to be used. In contrast, the content of the patent application is to be taken from the documents as a whole, without the claims being given the same prominent position. The decisive factor is whether the skilled person was able to recognize from the original disclosure that the amended proposed solution was to be included in the request for protection from the outset (Federal Supreme Court, X ZR 104/06, BeckRS 2008, 00866, para. 14 – unzulässige Erweiterung).

**114**

1. Contrary to the defendant's view, the combination of claims chosen by the plaintiff is disclosed by origin.

**115**

a. The defendants base their view that the combination of features is not disclosed on the fact that claim 1 of the patent in suit as granted is essentially based on the original claims 14, 15, 16 and 11 of application WO '021 (Exhibit ... 12), whereby feature 1.3 additionally includes the feature relating to a standard IEEE 802.11ax. In the original application WO '021, claim 15 was based on claim 14 and claim 16 on claim 15. The combination of these claims with the features of claim 11 was not originally disclosed, because the original claim 11 was dependent only on claim 1 (which was deliberately not pursued by the applicant (then Newracom Inc.) in the examination procedure).

**116**

The patent in suit distinguishes (as did the original application) between different embodiments and alternatives (see, for example, para. 12: either nested or non-nested structure, with even these structures being further subdivided into discrete alternatives and cases). These structures cannot be easily combined with each other, as they already have different objectives. The structures are therefore different embodiments. However, features of different embodiments of the original disclosure may not be combined if their combination results in an embodiment which is not disclosed as a possible embodiment in the original application documents. This applies in particular if - as here - alternative embodiments are involved.

**117**

b. The defendant's argument does not hold water. Paragraph [0799] of Exhibit ... 12 states in the last sentence that two or more embodiments can be combined with each other. The patent itself therefore makes it clear that a combination is expressly permissible. This is not just an empty general clause, but rather concrete design possibilities. In contrast to the situation underlying the EPO's decision of March 24, 2017 (file no. Z 1538/12, BeckRS 2017, 123843, para. 37), in which reference is made solely to the possible existence of other, undisclosed embodiments without any specific instructions, para. [0799] permits the combination of already disclosed embodiments. The order of certain sequences could also be changed. Thus, the combination of the various claims as originally filed is allowed. Even if one followed the defendant's view on the prohibition of combination, one would not arrive at a different assessment, especially since para [0022] discloses that the frame comprises a 2X HE-LTF in which both the first set of positions and the second set of positions are each on the non-zero subcarriers. This is also supported by the fact that the subject matter was known during the grant procedure and that the patent was ultimately granted in the present form.

**118**

2. The fact that feature 1.3 of the patent in suit refers to the IEEE 802.11ax standard, which had not yet been published at the filing date, does not constitute an impermissible extension either.

**119**

a. The defendants see an impermissible extension in the fact that the specific structure of the 2XHE-LTF was not known to the skilled person on the filing date. The 2XHE-LTF is a newly defined field in the 802.11ax standard that did not exist in previous versions of this standard. This structure is also not specifically described in the specifications of ... Exhibit 12. Paragraph [0187] et seq. of ... Exhibit 12 only reveals an abstract concept for a 2XHE-LTF, in which essentially every second subcarrier should carry information. This concept leaves the skilled person considerable scope for choosing the exact tone sequence of a 2XHE-LTF sequence. Which of the possible concretizations should be chosen and which criteria should be used for the selection is not clear from the ... Exhibit 12.

**120**

b. The defendant's argument fails to recognize that it is not relevant to the invention how exactly the 2XHE-LTF sequence is designed. The only relevant aspect of the invention is that in a 2XHE-LTF only every second subcarrier carries information, and that the pilot tones should only be arranged on the non-zero subcarriers. The patent claims nothing more. For the invention, the specific configuration of the 2XHE-LTF and thus the question of whether +1 or -1 is located on each of the subcarriers other than zero is irrelevant. It is therefore also irrelevant whether the skilled person can construct such a field on the basis of the information contained in the patent in suit, because the instructions for construction are not claimed.

**121**

II. there is no lack of disclosure regarding the construction of a 2XHE-LTF. The defendants base the attack of lack of practicability on the fact that the patent in suit does not teach how to construct the 2XHE-LTF of an IEEE 802.11ax standard listed in feature 1.37.3.

**122**

1. The question of whether an invention is so clearly and completely disclosed that a skilled person can carry it out is a question of law. Before assuming a lack of practicability, the claim must first be interpreted and any ambiguities must be eliminated in this way (Federal Supreme Court (BGH) GRUR 2018, 395 para. 34 - Wasserdichter Lederschuh; GRUR 2015, 472 para. 35 - Stabilisierung der Wasserqualität; BPatG BeckRS 2017, 122188 para. 42). In addition, it must be ensured that any ambiguities are not equated with lack of practicability because - in contrast to Art. 84 EPC - the Patent Act does not recognize the lack of clarity of the claim as a ground for invalidity (Federal Supreme Court BGH GRUR 2013, 1210 para. 14 - Dipeptidyl peptidase inhibitors; GRUR 2010, 414 para. 20 - thermoplastische Zusammensetzung).

**123**

The practicability of the invention disclosed by the application is given if the average person skilled in the art is able, for reasons of the information contained in the application, using the level of information and knowledge to be expected of him/her and the general specialized knowledge and with the help of the means of implementation shown by the applicant, to implement the teaching for technical action described and claimed in the application documents in a reliable, repeatable and straightforward manner, which is described and claimed in the application documents, in a reliable, repeatable and straightforward manner without having to make an unreasonable effort and accept an unreasonable number of initial failures (Federal Supreme Court GRUR-RS 2020, 42976 para. 44 - L-Aminosäureproduktion; BeckRS 2019, 8809 para. 41 - Dampftrockner; GRUR 2010, 916 (918) - Klammernahtgerät; Federal Supreme Court (BGH) BeckRS 2009, 02615 para. 20, 23).

**124**

2. As just shown, the patent in suit does not claim the specific construction of the 2XHE-LTF, so that the lack of construction instructions does not give rise to a lack of practicability. It is not apparent that no frames with pilot tones could be constructed on the basis of this missing construction instruction with regard to the 2XHE-LTF.

**125**

III. The citations NK6, NK9 and NK10 do not anticipate the subject-matter of the patent in suit to the detriment of novelty, since they were not prior art at the priority date due to the effective priority of US application 62/159, 187 (Exhibit NK5) filed on May 8, 2015.

#### **126**

The defendants argue that the priority claimed by the patent in suit (Exhibit NK5) is not validly claimed because the subject-matter of the claims does not concern "the same invention" within the meaning of Article 87(1) EPO. The subject-matter of the claims does not follow directly and unambiguously from the priority application. Consequently, the effective priority date for all claims is May 9, 2016, so that the patent in suit with regard to the citations

- IEEE 802.11-16/0024r1, "Proposed TGax draft specification", published on March 2, 2016 (Exhibit NK6)

- IEEE 802.11-15/0819r111ax, "OFDMA Tone Plan Leftover Tones and Pilot Structure", published on July 13, 2015 (Exhibit NK9) and

- IEEE 802.11-15/0132r15, "Specification Framework for TGax", published on January 28, 2016 (Exhibit NK10)

is not new.

#### **127**

1. Claiming the priority of an earlier application requires that the priority documents clearly disclose the entirety of the features of the technical teaching described by the claim (Federal Supreme Court GRUR 2012, 1133, 1st Ls.). The patent application is therefore only entitled to a right of priority if the invention claimed therein has been disclosed in the priority document in a manner that is capable of being carried out (Benkard EPC/Grabinski, 4th ed. 2023, EPC Art. 88 para. 12).

#### **128**

(2) The defendant disputes the validity of the priority application by arguing that features 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 and feature group 1.9.x and the corresponding features of adjacent claim 7 are not directly and unambiguously derivable from the priority application.

#### **129**

a. The frame mentioned in claims 1 and 7 of the patent in suit was claimed to contain the resource unit with the pilots (feature 1.2/7.2 "frame (400 - Figure 4) including the resource unit"). This aspect could not be taken directly and unambiguously from NK5. With regard to the frame, the independent claims as granted referred to Figure 4 (or 4A) of the patent in suit, which was not contained in the priority application. According to the patent in suit, Figure 4A shows an OFDMA frame 400 with a High Efficiency (HE) Long Training Field (LTF) 408, see paragraphs [0013], [0065], [0066]. Such a frame is not directly and unambiguously derivable from priority application NK5.

#### **130**

Claim 1 and claim 7 each define a single resource unit. A frame with a single resource unit is not disclosed in the priority application. The reference signs in features 1.1 and 7.1 refer to Figures 54A and 54B, which are not disclosed in the priority application, and which show a "nested" pilot structure with a plurality of resource units of different sizes which are in a precisely predetermined frequency alignment with each other, see paragraph [0103] of the patent in suit. In this "nested" pilot structure, the arrangement of the pilot tones of the smallest resource unit is first determined, and only this arrangement determines the positions of the pilots of the 52-subcarrier resource unit claimed here, see paragraph [0207] of the patent in suit. These relationships were missing in the independent claims.

#### **131**

b. Contrary to the defendant's view, the patent in suit in claim 1 does not require that exactly one resource unit be in a frame. The claim does not contain a limitation to a "nested" pilot structure, even if it is disclosed in the priority document.

**132**

In fact, Exhibit NK5 shows a single resource unit in both Figure 15 and Figure 16. Figures 15 and 16 each show an example of the arrangement of pilot tones with even and odd index, respectively, of the subcarrier of the resource unit with 52-subcarriers and an even arrangement of the LTF sequence in the 2XLTF design. Here, option 1 determines that the distance between two pilots in a resource unit with 52 subcarriers is 13, 11 and 13 subcarriers and the distance from the edge of the resource unit to the pilot tones is 5 and 6 subcarriers.

**133**

On the subject of 2XLTF, Exhibit NK5 states on p. 9 in the penultimate paragraph that the 802.11ax system knows two types of LTF OFDM symbols. In one case, information is sent on every subcarrier (4xLTF), in the other only on every second subcarrier (2XLTF). In the latter case, either only all subcarriers with an even index or only all subcarriers with an odd index would carry information, with the exception of the DC tones in each case.

**134**

From p. 11, 2nd paragraph of NK5 it is further apparent that in a resource unit with 26-subcarriers, the distance between the two pilot tones is 13-subcarriers and the distance between the pilot tones and the edge of the resource unit is 5 and 6 subcarriers respectively. This clearly shows the nested structure claimed in the patent in suit. The pilot tones contained in the RU with 26-subcarriers are in the same position in an RU with 52-subcarriers - so if you know the position of the pilot tones in an RU with 26-subcarriers, you also know their position in a 52-tone structure.

**135**

3. To the extent that the defendant further argues that the "2X HE LTF of an IEEE 802.11ax standard" mentioned in feature 1.3/7.3 is not sufficiently disclosed in the priority document, it must again be taken into account that the exact embodiment of the 2XHE LTF sequence is not claimed by the patent in suit.

**136**

IV. The absence of inventive step cannot be assumed with the sufficient probability required for a suspension.

**137**

The defendants are of the opinion that the invention according to the patent in suit lacks inventive step based on

- IEEE 802.11-15/0330, "OFDMA Numerology and Structure", published on March 9, 2015 (Exhibit NK11),
- IEEE 802.11-15/0349, "HE-LTF Proposal", published on March 9, 2015 (Exhibit NK12) respectively
- IEEE 802.11-15/0132r4, "Specification Framework for TGax", published on March 27, 2015 (Exhibit NK13).

1. According to the case law of the Federal Supreme Court, in order for the subject matter of an invention to be considered obvious, it is firstly necessary that the skilled person, with the knowledge and skills acquired through his/her training and professional experience, has been able to develop the inventive solution to the technical problem from what is available. Secondly, the skilled person must have had reasons to pursue the path of the invention. This usually requires additional impulses, suggestions, hints or other occasions that go beyond the recognizability of the technical problem (Federal Supreme Court BeckRS 2018, 13279 para. 49 f.).

**138**

2 The defendants submit that NK11 and NK12 are contributions to an IEEE standardization meeting in March 2015, in which the TGax standardization group discussed the then future 802.11ax standard. The two contributions were based on an OFDM symbol length of 12.8 $\mu$ s (NK11: slide 9; NK12: slide 9). This OFDM symbol length is referred to as 4xOFDM, as it is four times the OFDM symbol length defined in the preceding WLAN standard 802.11ac (NK11: slide 9, 2nd point).

**139**

NK11 proposes a future OFDMA structure. For the OFDM symbol length of 12.8  $\mu$ s, 256 SCs are included in the 20 MHz frequency range, 512 SCs in the 40 MHz frequency range, 1024 SCs in the 80 MHz frequency

range and 2048 SCs in the 160 MHz frequency range (see slide 9, 2nd point). Not all of these SCs are available for information transmission - zero tones could be present around the DC-SC and at the edges of the frequency range. The OFDMA structure should be as simple and efficient as possible and, as far as possible, reuse the design of the previous standards (see slides 11 and 12). As a result, RUs with a number of 52 SCs, including 4 pilot SCs, are proposed (see slide 13).

#### **140**

In addition to the 4xHE-LTF field (with the 4xOFDM length), NK12 proposes the use of the 2XHE-LTF field (with a half length of 6.4µs) (see slide 14).

#### **141**

The application of the two contributions NK11 and NK12 together leads to the subject-matter of the independent claims.

#### **142**

NK11 did not explicitly show the 2XHE-LTE field (feature 1.3) and thus did not explicitly show that pilot tone positions were localized in non-null SCs of the 2XHE-LTE field (part of features 1.7 and 1.8). Separation of pilot tone positions by eleven SCs (features 1.9.1.3 and 1.9.2.3) and the distance of six SCs to the SC with the lowest or highest index (feature 1.9.2.1 and 2nd part of feature 1.9.1.4) were also not shown in NK11.

#### **143**

The skilled person would be familiar with the standardization process and standardization documents including contributions and reports/drafts in which only the already approved standard features are written down. He would read the pilot tone positions from the previous 802.11 a/g standard when reading NK 11. It would be obvious for him to adopt these positions for the new standard as well.

#### **144**

NK11 had left some points open, particularly with regard to the proposed structure and pilot tone positions ("Exact location of leftover tones is open for discussions", "102 tones + TBD pilots RU", cf. slide 25).

#### **145**

The combination of NK 11 and NK12 was prompted because both documents were prepared for a standardization meeting in March 2015 and NK12 also dealt with the structure of resources and data in the physical layer (cf. title of slide 9, "HE PHY Frame Format") and in particular with the length of the OFDM symbol, even if for the specific case of HE-LTF field.

#### **146**

3. Contrary to the defendant's view, it is not apparent that the skilled person would read the pilot tone positions from the previous standard 802.11a/g when reading NK 11 and that it would be obvious for him/her to adopt the pilot tone positions used there for the new standard as well. This view goes beyond the disclosure of NK11. The relevant slides 12 to 14 only deal with the number of subcarriers in resource units and the number of pilot tones in the resource units. Nothing can be inferred from NK11 about the positioning of the pilot tones.

#### **147**

One particular argument against a combination is that NK12 is still based on "resource blocks". This is a concept from the predecessor standards to the 802.11ax standard. A resource block covers the entire bandwidth of a channel at the frequency level and is uniformly assigned to a single user. NK11, on the other hand, already refers to resource units. Several resource units can be arranged next to each other on the bandwidth and these can be assigned to different users. NK11 and NK12 are therefore based on completely different concepts.

#### **148**

The introduction of resource units means that, for the first time, several resource units can be located next to each other in a single channel, whereby the indices of the lowest subcarriers of different resource units in particular can be even or odd.

#### **149**

The combination of NK11 with NK12 therefore violates the prohibition of retrospective consideration.

#### **150**

4. Also with regard to a possible combination of NK11 with NK13, no lack of inventive step can be assumed. NK13 is a document in which the already approved proposals for the then still future standard 802.11 ax are collected. NK 13 only confirms the approval of the proposal from NK12. The same applies to the combination of NK11 and NK12.

#### **151**

V. Accordingly, the Chamber exercises its discretion pursuant to Section 148 Code of Civil Procedure (ZPO) not to stay the litigation with regard to the nullity action before the Federal Patent Court.

#### *E.*

#### **152**

The auxiliary requests filed by the defendants seeking secrecy protection orders for the information from disclosure and accounting are unfounded. The provisions of the GeschGehG are not applicable to such information via Section 145 a PatG, as this only covers the information introduced into the proceedings by the parties. According to the wording of the provision alone, information to be provided on the basis of an enforceable claim is not covered. This is not a submission made by a party in the course of the proceedings, but rather the fulfillment of a tenor substantive claim to be provided directly to the creditor (Düsseldorf Higher Regional Court, GRUR 2023, 677 - Geheimnisschutz II, margin no. 8). In addition, the defendant's confidentiality interests are taken into account by the fact that details requiring confidentiality outside the data subject to disclosure may be redacted when providing information.

#### *F.*

#### **153**

I. The decision on costs follows from Section 91 Code of Civil Procedure (ZPO). The decision on provisional enforceability is based on Section 709 Code of Civil Procedure (ZPO).

#### **154**

II. Since the security payment is intended to secure the claim of the enforcement debtor under Section 717 (2) Code of Civil Procedure (ZPO), its amount must be assessed accordingly (Ulrici, BeckOK ZPO, version March 1, 2024, Section 709, para. 3). Despite an extensive submission by the defendant, the security deposit was to be set at the amount shown in the operative part, which is based on the Chamber's more recent case law and which - as a rule - considers an amount of no more than approx. 5 times the amount in dispute to be appropriate for disputes in the telecommunications sector. The defendant has not substantiated a need for security going beyond this.

#### **155**

1. If the defendants assert a possible counterclaim significantly exceeding the amount in dispute pursuant to Section 717 (2) Code of Civil Procedure (ZPO), they must make a substantiated submission in this regard and substantiate this submission with reliable documents. As a rule, it will not be sufficient to make a general claim that the potential loss represents a certain percentage of turnover. Rather, such claims must generally be substantiated by tax documents (tax returns and tax assessments). This is because with these documents there is a presumption that no embellishing statements are made (because otherwise the tax burden would increase). For internationally active companies, all tax documents for the Federal Republic of Germany and for all countries for which tax-relevant outflows (license payments or group-related compensation payments) are claimed and for all production locations must therefore generally be submitted.

In order to be able to adequately take annual fluctuations into account, it will generally be necessary to submit the relevant documents for at least the last three years.

**156**

The court does not fail to recognize that this entails a considerable burden of presentation. However, since the setting of a high security deposit considerably weakens the claim for injunctive relief, this is acceptable, especially since the German Secrets Protection Act provides for sufficient safeguards in the discovery proceedings to protect the interests of the defendant in this respect as well.

**157**

2. The defendants did not comply with these requirements. The affidavit of ... (Exhibit B 10) does not set out the necessary data to justify the ... as security. The fact that ... works as CFO for the defendant's parent company because, according to his statements, he has all the information relevant to the defendant in Germany.

**158**

Despite the large scope of the affidavit and the data submitted with it, the calculation is largely - even almost exclusively - based on unverifiable information and estimates.

**159**

The starting point is the table on page 3 of the affidavit (Exhibit B 10), which is explained by statements of ... . For the defendant ... this results for the period from ... a total turnover in the Federal Republic of Germany of ..., which is already reduced by discounts of ... so that an actual achievable turnover of only ... remains. With this turnover, the defendants would like to generate by ... a profit totaling ... .

**160**

Despite the extensive submission, there is a lack of any submission on the actual production costs of the defendant's products. Moreover, because the transactions in question are between companies belonging to the group, it would be necessary for reliable documents to be submitted from which the alleged margins can actually be derived. This has not been done.

**161**

The estimates presented in the lower part of the referenced table with regard to the future damage items are based on assumptions that are not substantiated in any way and therefore cannot form the basis for setting the high security required.

**162**

The Chamber does not fail to recognize that the defendant may incur higher costs in the event of enforcement. This can already be inferred from the submission in the affidavit, according to which the defendant has achieved a not inconsiderable turnover. However, since it is not the task of the court to pick out individual items from an obviously far too broad submission by the defendant, an estimate based on reasonable economic standards must be made in accordance with Section 252 German Civil Code (BGB), Section 287 Code of Civil Procedure (ZPO). This cannot be based on the license amounts in dispute between the parties. This is because a worldwide license is being negotiated there and in the present case the enforcement only concerns the territory of the Federal Republic of Germany.

**163**

Another aspect to be taken into account when measuring the security deposit is that the defendants have not yet made any license payments to the plaintiff. Since it can be reasonably assumed that the entire patent portfolio of the plaintiff will not be forfeited, there is at least secondary security for a possible claim via a right of retention with regard to any license payments.