

Please note: This is an unofficial translation of parts of a judgement by a German court from the original German language into English for your convenience. It is neither an official document, nor does it constitute legal advice.

**Frankfurt Regional Court
25 February 2026
2-06 O 426/24**

Action for conclusion of a FRAND agreement

Headnote

1. In principle, a claim by a licence seeker against the proprietor of Standard-Essential Patents for the conclusion of a patent licence agreement on FRAND terms can be derived from sections 33 and 33a (1) German Act against Restraints of Competition (*GWB*).
2. An action for the conclusion of a FRAND licence agreement may, in principle, be admissible.
3. An action for the conclusion of a FRAND licence agreement is justified if the patent proprietor has not made an offer that satisfies FRAND terms, the agreement sought complies with FRAND terms, and the licence fee to be agreed lies at the upper end of or above the FRAND corridor.
4. When calculating the licence fee, it is preferable to use comparison licences as a basis. If there are no comparison licences to refer to, the licence fee may be calculated in another way.
5. The question of whether the licence fee demanded falls at the upper end of the FRAND corridor or above it can be answered by way of an estimate pursuant to section 287 German Code of Civil Procedure (*ZPO*).

Operative part

The action is dismissed.

The Claimant must bear the costs of the dispute.

The judgment is provisionally enforceable in return for a security of 110 % of the respective amount to be enforced.

Facts

- 1 The parties are in dispute over the granting of a patent licence on "FRAND terms", with the Claimant submitting a draft agreement and making the licence fee proposed therein the subject of the main request and two auxiliary requests.
- 2 Both parties operate in the mobile communications sector. Among other things, they manufacture and offer mobile phones.
- 3 The Defendant – like the Claimant – is the proprietor of patents that are essential for several mobile communications standards (e.g. the 3G, 4G or 5G standards) ("Standard-Essential Patents" ("SEPs")). In this regard, the Defendant has issued FRAND declarations, namely declarations to grant licences for these patents to all interested third parties on fair, reasonable and non-discriminatory terms.

- 4 The Claimant's parent company, ... (referred to here as "X", but also "Party" or "Claimant"), is itself the proprietor of numerous (SEP) patents.
- 5 The Claimant is seeking, on its own behalf and on behalf of its parent company, ..., such a FRAND licence for SEP [... deleted due to a confidentiality order...] in accordance with its offer in Exhibit GMW1, in particular at the price stated therein.
- 6 X and the Defendant entered into a licence agreement in the year... ("[year] Licence", Exhibit GMW2). In this agreement, the Defendant undertook [... deleted due to a confidentiality order...]. The parties are in dispute over the interpretation of the agreement.
- 7 [... deleted due to a confidentiality order...].
- 8 One of the subjects of the Claimant's offer referred to in the requests, dated [... deleted due to a confidentiality order...], is a term of several years covering [... deleted due to a confidentiality order...] at a licence rate of [... deleted due to a confidentiality order...]. [... deleted due to a confidentiality order...]
- 9 The parties, namely X and the Defendant, are involved in further patent law disputes before German and international courts. Reference is made to the pleadings in the Claimant's written statement dated 25 April 2025, pages 16 ff. (pages 361 ff. of the file), as well as to the Defendant's pleadings in its statement of defence (pages 694 ff. of the file). The proceedings before English courts concern the determination of global FRAND licensing terms. Before a court in Chongqing, China, the Defendant in these proceedings is seeking [... deleted due to a confidentiality order...]. Before the UPC, Local Division Mannheim, X is seeking, by way of a counterclaim filed on 19 May 2025, the conclusion of [... deleted due to a confidentiality order...]. [... deleted due to a confidentiality order...] Before a court in California, USA, the Claimant is seeking [... deleted due to a confidentiality order...].
- 10 The parties are accusing each other of being unwilling to grant/take licences or reach an agreement. [... deleted due to a confidentiality order...]
- 11 The Claimant asserts that [... deleted due to a confidentiality order...].
- 12 The Claimant's offer complies with the FRAND standard and is already "at the upper end of possible licence payments that can still be regarded as FRAND". The Claimant's offer is reasonable under FRAND terms, whereas the Defendant's offer exceeds the corresponding value many times over, even when applying what would be the most favourable assumptions for the Defendant.
- 13 The Claimant further pleads as follows in this regard:
- 14 When calculating the appropriate remuneration, it is customary to conduct a comparative market analysis, in which the market-dominant company's past conduct in the relevant market must be taken as a basis and compared with the current demands. When determining FRAND prices, reference should therefore be made to licence agreements that have already been entered into. A price previously agreed by contract is therefore usually in line with market conditions, so there is good reason to assume that it is reasonable.
- 15 Its offer is in line with standard industry practice and [... deleted due to a confidentiality order...].

- 16 The [year] Licence [... deleted due to a confidentiality order...]
- 17 The [year] Licence must be used as the basis for the calculation, [... deleted due to a confidentiality order...]
- 18 Furthermore, by virtue of the prohibition of discrimination, the Defendant is bound by the prices granted to the Claimant under the [year] Licence and by its licensing concept, and may only deviate from these on objective grounds. Furthermore, expired licences can also serve as a benchmark for comparison.
- 19 As long as the Defendant [... deleted due to a confidentiality order...], the [year] Licence is the sole basis for comparison. [... deleted due to a confidentiality order...]
- 20 The Claimant identified the parameters of the [year] Licence that are relevant to the licence fee for the purposes of its offer and assigned corresponding values to them [... deleted due to a confidentiality order...]. In this regard, the Claimant also refers to private expert opinions it submitted (Exhibits GMW13, GMW31), which [... deleted due to a confidentiality order...]
- 21 The Defendant's offer does not comply with FRAND terms.
- 22 As there is a prior or comparison licence, it is incumbent on the Defendant to explain why the increased fees are also fair and reasonable.
- 23 The [... deleted due to a confidentiality order...] The "top-down approach" is unsuitable and is [... deleted due to a confidentiality order...]. The comparable market approach must be preferred to the top-down approach if the two yield different results. [... deleted due to a confidentiality order...]
- 24 Furthermore, the Defendant's offer is likely also discriminatory, since [... deleted due to a confidentiality order...]
- 25 The Claimant takes the view that it can assert claims against the Defendant under sections 33 and 33a (1) German Act against Restraints of Competition (*GWB*) in conjunction with Article 102 TFEU and Article 101 TFEU.
- 26 The request asserted is admissible. This is not precluded by the existence of a "FRAND corridor", as the claim relates to a licence within the corridor or at a level that is just within the FRAND parameters. [... deleted due to a confidentiality order...]
- 27 The claim is also justified. By refusing to accept the Claimant's offer, the Defendant is abusing its dominant market position as the proprietor of an SEP. Ultimately, the sole condition for entitlement to a licence is that the patent is an SEP and that the patent proprietor is unlawfully refusing to grant a FRAND licence, since the patent proprietor's FRAND declaration gives rise to a legitimate expectation on the part of third parties that it will in fact grant licences on those terms. The obligation to grant a licence is a mandatory consequence of participation in the standard establishing a dominant market position.
- 28 The Defendant holds a dominant market position. In this respect, each SEP constitutes a separate technology market in which the Defendant holds absolute market power. The Defendant holds relevant patents in all the standards cited by the Claimant. [... deleted due to a confidentiality order...]

29 By [... deleted due to confidentiality order...] and refusing to accept X's offers, the Defendant is abusing its dominant market position. Submitting an offer that does not comply with FRAND terms is to be regarded as a refusal. This directly affects the Claimant.

30 The Claimant is willing to take a licence unconditionally and without reservation. [... deleted due to a confidentiality order...] It is clear that the Defendant is unwilling to grant a licence.

31 The Claimant is therefore entitled to a contractual licence from the Defendant to permit it to use the protected technical teaching on FRAND terms. The [year] Licence [... deleted due to a confidentiality order...]. The Defendant is obliged, by way of restitution in kind pursuant to section 249 (1) German Civil Code (*BGB*), to accept the Claimant's offer; there is a legal obligation to contract.

32 The calculation should be based on the comparison licence, whereby [... deleted due to a confidentiality order...]

33 The Court may estimate the amount owed in accordance with section 287 German Code of Civil Procedure (*ZPO*).

34 The Claimant most recently requested that

35 the Defendant be ordered to accept the offer made by X to enter into a licence agreement, as set out in Exhibit GMW 1;

36 in the alternative,

37 the Defendant be ordered to accept the offer made by X to enter into a licence agreement, as set out in Exhibit GMW 1, whereby in clause 4.1 of the Exhibit, the wording "[... deleted due to a confidentiality order...]" is replaced by the wording "[... deleted due to a confidentiality order...]";

38 in the further alternative,

39 the Defendant be ordered to accept the offer made by X to enter into a licence agreement, as set out in Exhibit GMW 1, whereby in clause 4.1 of the Exhibit, the wording "[... deleted due to a confidentiality order...]" is replaced by the wording "[... deleted due to a confidentiality order...]".

40 The Defendant requests that

41 the action be dismissed.

42 The Defendant considers the action for the conclusion of a licence agreement to be inadmissible. The Claimant may only bring an action for the submission of a FRAND offer, but not for the acceptance of a specific offer, as it is solely incumbent on the Defendant to submit an offer. The action for conclusion of an agreement reverses the allocation of roles provided for under the FRAND regime. The Claimant also cannot specify the text of the licence agreement in its action.

43 Section 33 German Act against Restraints of Competition (*GWB*) cannot generally be interpreted as imposing an obligation to contract, but at most as giving rise to a claim for injunctive relief.

44 The Claimant also lacks a legitimate interest to take legal action, as it is not willing to take a

licence.

- 45 Furthermore, by bringing multiple proceedings, the Claimant is acting abusively. The Claimant's aim is to sue for a licence fee below the licence corridor. By bringing the matter before various forums, X is delaying the establishment of a FRAND licence.
- 46 The Defendant further submits as follows:
- 47 The Claimant has failed to sufficiently demonstrate the Defendant's dominant market position. Within a standard, it is frequently the case that not all SEPs are absolutely essential.
- 48 There is also no abuse of a dominant market position. Such a claim is already ruled out because the Claimant has not consistently demonstrated a willingness to take a licence. Seeking a high licence fee does not generally render an offer arbitrary or contrary to competition law; further punitive factors would need to be present in order to regard the patent proprietor's conduct as wholly unacceptable or to classify it as not being made in good faith.
- 49 The Claimant's conduct demonstrates its unwillingness to take a licence. Since [... deleted due to a confidentiality order...], the Claimant has been blocking the conclusion of a licence agreement and has failed to conduct the licence negotiations in a proper manner. As the Claimant is unwilling to take a licence, the FRAND terms of the Defendant's offer are irrelevant. This is because the FRAND regime, with its obligations on the parties, also applies in an action for conclusion of an agreement. The Claimant must therefore be willing to take a licence.
- 50 The Claimant's "lip service" to entering into an agreement on FRAND terms is undermined by its failure to cooperate in good faith in determining a FRAND licence rate.
- 51 The unwillingness to take a licence also stems from the fact that the Claimant has not yet provided sufficient security or made an advance payment and [... deleted due to a confidentiality order...].
- 52 The Defendant's conduct also cannot be regarded as an abuse merely because it did not accept the Claimant's offer; rather, any such abuse would lie, at most, in the Defendant's failure to submit a FRAND-compliant offer of its own. However, the Defendant has consistently been willing to grant a licence. The request for a forum in China is also FRAND-compliant.
- 53 The Defendant's conduct and the offers set out in Exhibits GMW9 and GMW7/7a satisfied the FRAND terms. [... deleted due to a confidentiality order...]
- 54 The expert opinions obtained by the Defendant, as set out in Exhibits B23, B24, B37 and B38, confirmed that the offers complied with FRAND terms. The methodology is deemed appropriate and in line with standard practice. The value set by the Claimant, however, is not FRAND-compliant.
- 55 The Defendant's offers are also not discriminatory. [... deleted due to a confidentiality order...]
- 56 The [year] Licence is not suitable as a comparison licence. [... deleted due to a

confidentiality order...]

57 In the [year] Licence, [... deleted due to a confidentiality order...]

58 The Claimant's most recent offer is also too low. In this regard, the Defendant refers to its supplementary expert opinion dated [...].

59 Section 287 German Code of Civil Procedure (*ZPO*) does not apply in the dispute, as the matter at issue does not concern the assessment of damage but an action for conclusion of an agreement.

60 [... deleted due to a confidentiality order...]

61 For further details, reference is made to the written statements exchanged between the parties together with the exhibits as well as the other contents of the file.

Reasons for the decision

I.

62 The claim is admissible.

63 1. Pursuant to sections 87, 89 (1) German Act against Restraints of Competition (*GWB*) in conjunction with section 42 (1) Hessian Ordinance on Jurisdiction (*JuZuV*) as well as section 32 German Code of Civil Procedure (*ZPO*) and Article 7 (2) Brussels Ia Regulation, the court seised has subject-matter, local and functional jurisdiction (with regard to local jurisdiction for the action for conclusion of an agreement at the place where the tortious act under competition law occurred, Kühnen, GRUR 2019, 665, 668 with further references). Furthermore, jurisdiction is established by the Defendant entering an appearance without contesting jurisdiction.

64 2. The request is sufficiently precise within the meaning of section 253 (2) no. 2 German Code of Civil Procedure (*ZPO*), as the Claimant is seeking an order requiring the Defendant to accept a specific, fully drafted contractual offer (see also in this regard Munich I Regional Court, judgment dated 12 April 2024 – 21 O 16085/22, GRUR-RS 2024, 48852 margin no. 150).

65 3. The action brought for the conclusion of a licence agreement is, in principle, admissible.

66 a. An action for conclusion of a licence agreement may, in principle, be admissible.

67 aa. Under section 33 (1) German Act against Restraints of Competition (*GWB*), whoever violates a provision of Part 1 of the same or, among others, Articles 101 or 102 Treaty on the Functioning of the European Union (TFEU) will be obliged to the person affected to remedy the harm caused by the infringement and, where there is a risk of recurrence, to desist from further infringements. The claim for remediation is aimed at eliminating a source of ongoing disruption resulting from a prior infringement. This may also encompass an obligation on the part of the infringer to contract if refusing to enter into an agreement constitutes the act of infringement (see Kamann/Ohlhoff/Völcker, Kartellverfahren-HdB/Lahme, 2nd ed. § 41 margin no. 14 with further references). The corresponding action for conclusion of a licence offer is generally recognised in competition law case law and literature (Stuttgart Higher Regional Court, NZKart 2020, 258 margin no. 173; Munich I Regional Court, judgment dated 12 April 2024 – 21 O 16085/22, GRUR-RS 2024, 48852

margin no. 150; Fuchs/Weitbrecht PrivKartellRDurchs.-HdB/Holz Müller, 2019, § 10 margin nos. 142 f.; Eckel, NZKart 2017, 408, 414 with further references). This is not precluded by the fact that, in its decisions "FRAND Objection I" and "FRAND Objection II", the German Federal Court of Justice (*BGH*) considered the patent proprietor to be obliged, from a competition law perspective, to submit an offer to the licence seeker or criticised the patent proprietor for not having made sufficient efforts to "facilitate" a licence agreement (see German Federal Court of Justice, NZKart 2020, 441 – FRAND Objection I; German Federal Court of Justice, NZKart 2021, 178 margin no. 54 – FRAND Objection II), particularly as the German Federal Court of Justice explicitly states in the "FRAND Objection II" decision that the infringer willing to take a licence "is entitled to have the patent proprietor contractually permit it to use the protected technical teaching on FRAND terms" (German Federal Court of Justice, NZKart 2021, 178 margin no. 54 – FRAND Objection II). In some cases, the literature has already concluded from the grounds of the decision that an action for conclusion of an agreement is possible (MüKoWettbR/Lübbig, 4th ed. 2022, German Act against Restraints of Competition (*GWB*) § 33 margin no. 18 at the end). Furthermore, the German Federal Court of Justice's decisions were each made in the context of patent infringement actions following the licence seeker's FRAND (compulsory licence) defence under competition law. Accordingly, the German Federal Court of Justice did not have to address the question of the procedural admissibility of an action for conclusion of an agreement.

- 68 The UPC, Local Division Mannheim, also considers an action for conclusion of an agreement to be admissible in principle (UPC Local Division Mannheim, GRUR 2025, 62 margin no. 237 ff.). In this respect, it refers to the Opinion of Advocate General Wathelet at the ECJ, who, for his part, merely notes that it is contrary to the infringer's/licence seeker's unwillingness to take a licence if the latter requests that the aforementioned conditions be determined by a court or an arbitral tribunal (NZKart 2015, 247 margin no. 93). Insofar as the Defendant seeks to infer from this decision that the UPC, Local Division Mannheim, did not rule on the admissibility of the counterclaim brought before it, the grounds for the decision do not support this. The UPC expressly accepts the admissibility of the counterclaim but dismisses it on the grounds that it is unfounded.
- 69 Even insofar as the Defendant relies on the order of Munich I Regional Court, which it submitted in one of the injunction proceedings between the parties, this does not imply that Munich I Regional Court considers an action for conclusion of an agreement to be inadmissible. It is true that the legal literature argues that an action for conclusion of an agreement may be unreasonable for the licence seeker because, in the absence of information available only to the patent proprietor, the licence seeker could not be expected to know the terms customary in the industry and/or the correct amount of the FRAND licence (Kühnen, GRUR 2019, 665, 667). For this reason, an action for the submission of a FRAND licence offer (Kühnen, GRUR 2019, 665, 668) is deemed necessary. However, this does not mean that the action for conclusion of an agreement should be regarded as inadmissible per se.
- 70 bb. However, an obligation to contract arises as a legal consequence under section 33 (1) German Act against Restraints of Competition (*GWB*) only if this is the only appropriate means of removing the unreasonable obstruction and the conclusion of such an agreement does not itself contravene any statutory prohibitions (Stuttgart Higher Regional Court,

NZKart 2020, 258 margin no. 173; Mü– KoWettbR/Lübbig, 4th ed. 2022, § 33 GWB margin no. 16). In the Panel's view, this implies that a claim to the conclusion of an agreement is only justified if the licence seeker's offer for entering into a licence agreement, first, fundamentally satisfies the FRAND terms and, second, falls within the "FRAND corridor" with regard to the licence fee offered (see German Federal Court of Justice, NZKart 2021, 178 margin no. 70 – FRAND Objection II: "Range of possible reasonable solutions", with further references; Munich I Regional Court, judgment dated 30 September 2020 – 21 O 13026/19, GRUR-RS 2020, 50638 margin no. 210) and, where applicable, only if the offer represents the upper end of the licence corridor.

- 71 Insofar as the Defendant takes the view that, from a doctrinal perspective, sections 33 and 33a German Act against Restraints of Competition (*GWB*) cannot give rise to an obligation to enter into an agreement, but only to a claim for injunctive relief, this is, at the very least, questionable in the light of the principles set out above. The German Federal Court of Justice (*BGH*) has in the past repeatedly recognised an obligation to contract, but in more recent decisions, it has repeatedly based a claim similar to the obligation to contract not on this, but on a claim for injunctive relief and remedial action (Kersting/Meyer-Lindemann/Podszun/Kersting, *Kartellrecht*, 5th ed. 2025, § 33 GWB margin no. 48 with further references). In the present dispute, however, it should be noted that, according to the case law cited above, in a FRAND situation – such as this one – where the Defendant has issued a binding FRAND declaration, it is recognised that the licence seeker does not merely have a claim for injunctive relief, i.e. aimed at the cessation of offers that are not FRAND, but also a claim for the conclusion of a licence agreement on FRAND terms.
- 72 b. The admissibility of the action is also not precluded by the fact that the Claimant is seeking a global licence and is bringing the matter before a German court to obtain an order against the Defendant, enforceable under section 894 German Code of Civil Procedure (*ZPO*), to enter into an agreement with effects not only in Germany or Europe, but worldwide.
- 73 aa. In this regard, it is generally acknowledged in the context of the FRAND licence defence in infringement proceedings that the licence seeker – depending on the individual case – may base its defence on the granting of a global licence; consequently, in such cases, only a global licence granted by the patent proprietor would be FRAND, or, conversely, the patent proprietor may limit itself to offering only global licences (see Düsseldorf Regional Court, judgment dated 11 September 2008 – 4b O 78/07).
- 74 The present dispute, however, concerns the reverse situation, namely that a German court is being asked to compel the Defendant to enter into an agreement which is also intended to take effect in non-European countries (see, on this point in general, ECJ, NJW 2009, 1655, margin no. 24 on the "anti-suit injunction"; critical, although this point was not decisive in that case, Düsseldorf Regional Court, judgment dated 11 September 2008 – 4b O 78/07, juris margin no. 109; Haedicke/Timmann *PatR-HdB/Bukow*, 2nd ed. 2020, § 13 margin no. 298; see Dornis, *GRUR Patent* 2023, 231 margin no. 43; open Immenga/Mestmäcker/Fuchs/Heinemann, *TFEU*, 7th ed. 2025, Article 102 margin no. 551; on the effect of the compulsory licence defence under § 24 German Patent Act (*PatG*) on European patents under the EPC Benkard *PatG/Kober-Dehm*, 12th ed. 2023, § 24 margin no. 6; on the jurisdiction of the UPC under Article 32 (1) UPCA Bopp/Kircher *EurPatentprozess-HdB/Kircher*, 3rd ed. 2025, § 19 margin no. 23 f., while leaving open

whether the UPC is authorised to set a licence rate, margin no. 27; on the proposal to establish a "FRAND tribunal" Contreras, 94 Washington Law Review 701 (2019)).

- 75 In this regard, the UPC, Local Division Mannheim, is examining in the proceedings referred to above (GRUR 2025, 62, margin nos. 237 ff.) in particular its own jurisdiction to rule on such counterclaims pursuant to Article 32 (1) (a) UPCA. However, it does not address the effects of an obligation to accept a contractual offer that is effective globally on jurisdictions outside the EU.
- 76 bb. As outlined above, as a general rule, only a global licence can be regarded as FRAND, provided that the licence seeker requests such a licence. Admittedly, given this global effect, when substituting a declaration of intent under section 894 German Code of Civil Procedure (*ZPO*) for an agreement of global scope, one might consider that a foreign court could refuse to recognise a corresponding decision on the grounds of public policy. However, this is irrelevant to the present decision, as the public policy of other legal systems is generally not to be taken into account unless a specific provision stipulates otherwise (see BeckOGK/Stürner, 1 November 2025, Article 6 Introductory Act to the German Civil Code (*EGBGB*) margin no. 146 with further references). The latter is not the case here, however.
- 77 c. In light of the foregoing, the admissibility of the present action must be assessed on the basis of the Claimant's coherent pleading of facts, in accordance with general principles. Accordingly, the action for conclusion of an agreement is admissible.
- 78 The Claimant has pleaded and substantiated in detail that [... deleted due to a confidentiality order...]. Furthermore, it has set out and substantiated by submitting an independent expert opinion that its licence offer, both in respect of the main request and the auxiliary requests, lies above the upper end of the FRAND corridor. This would therefore give rise to the situation described above, namely that the infringement alleged by the Claimant could not be remedied other than by concluding the contractual offer submitted.
- 79 In the Panel's view, whether or not the Claimant is willing to grant a licence is not to be examined in the context of admissibility, but rather in the context of the merits of the case when considering whether the Defendant has abused a dominant market position (see, in this regard, Munich I Regional Court, judgment dated 12 April 2024 – 21 O 16085/22, GRUR-RS 2024, 48852 margin no. 154).
- 80 4. The action is also not inadmissible on the grounds that the Claimant could be accused of abusing its legal rights.
- 81 An action must be dismissed as inadmissible on the grounds of lack of authority to pursue court proceedings if court proceedings constitute an abuse of rights. An abuse of rights is deemed to have occurred if the Claimant's primary motive is to pursue objectives unrelated to the matter at hand. The presumption of an abuse of right requires the relevant individual circumstances to be carefully examined and weighed up. An indication of an abuse of rights may arise where the Claimant pursues several similar or interrelated infringements against one or more persons in separate proceedings without objective justification, thereby significantly increasing the burden of costs (German Federal Court of Justice, GRUR 2017, 266, margin no. 23 – World of Warcraft I, with further references). An abuse of rights may also be deemed to exist if the Claimant intends to use the action as a means of harassment

(Cepl/Voß/Zigann/Werner, ZPO, 3rd ed. 2022, § 253 margin no. 32).

82 These conditions are not met in the present dispute. The Defendant is correct in stating that the Claimant and X are pursuing their request for a licence which, in their view, complies with FRAND terms in various forums and in various forms, and are doing so with great conviction. In this respect, however, it should be noted that, as the licence seeker, the Claimant is, in principle, in a weaker position in the present dispute, as it is dependent on licences for the Defendant's SEPs at issue. Obtaining such a licence which it considers to be FRAND-compliant is the underlying objective of all the proceedings brought by the Claimant and X. In application of the above case law, no irrelevant objective can be identified in this regard. Nor do the proceedings appear to be aimed at increasing the burden of costs.

II.

83 The action is unfounded, however.

84 The Claimant has no claim to the conclusion of the licence agreement submitted as Exhibit GMW1/1a pursuant to sections 33a (1) and 33 (1) German Act against Restraints of Competition (*GWB*) in conjunction with Article 102 Treaty on the Functioning of the European Union (TFEU), nor does it have such a claim pursuant to its auxiliary requests.

85 Pursuant to section 33 (1) German Act against Restraints of Competition (*GWB*), any person who violates section 19 German Act against Restraints of Competition (*GWB*) will be obliged to the person affected to remedy the harm caused by the infringement and, where there is a risk of recurrence, to cease and desist from further infringements. Where an offence is culpably committed, section 33a (1) German Act against Restraints of Competition (*GWB*) entitles the person affected to claim damages. In accordance with section 19 (1) German Act against Restraints of Competition (*GWB*), any abuse of a dominant market position by one or several companies is prohibited. In accordance with section 19 (2) no. 1 German Act against Restraints of Competition (*GWB*), an abuse exists in particular if a dominant company, as a supplier of commercial services, directly or indirectly impedes another company in an unfair manner or directly or indirectly treats another company differently from similar companies without any objective justification.

86 1. The Defendant holds a dominant market position within the meaning of Article 102 TFEU.

87 a. A dominant market position within the meaning of Article 102 TFEU is the economic power held by an undertaking which enables it to prevent effective competition from being maintained in the relevant market by allowing it to act independently of its competitors and customers to an appreciable extent (German Federal Court of Justice, GRUR 2020, 961 margin no. 55 – FRAND Objection I, with further references). A dominant position generally arises from a combination of several factors, none of which need to be decisive on their own. In this context, determining the market in question is of crucial importance. The determination of a relevant supply market is generally based on the "needs-based market concept" (*Bedarfsmarktkonzept*). According to this, the relevant market for products or services comprises all products or services which, by virtue of their characteristics, are particularly suited to satisfying a consistent demand and are only interchangeable with other products or services to a limited extent. Where an industry standard or another set of

rules regarded by customers as a standard (de facto standard) prescribes a design for a product that is protected by intellectual property rights and the product cannot be substituted for any other product from the perspective of the buyer, the granting of rights to allow potential suppliers of that product to bring it to market generally constitutes a separate market upstream of the product market (German Federal Court of Justice, GRUR 2020, 961 margin no. 57 – FRAND Objection I, with further references). Therefore, if such an independent licensing market is to be assumed, it must first be established that the patent in question is a standard-essential patent, that is that the use of the patented teaching is indispensable for implementing a standard (whether established by a standardisation organisation or adopted by the market), with the effect that it is generally not technically possible to circumvent it without sacrificing functions that are important to the product market. Furthermore, a prerequisite for an independent licensing market is that the technical teaching set out in the patent and the standard cannot be substituted for an alternative technical design of the product (German Federal Court of Justice, GRUR 2020, 961 margin no. 58 – FRAND Objection I, with further references).

- 88 b. The conditions for this are not met in the dispute. The Panel is satisfied that, according to these criteria, the Defendant holds a dominant market position in relation to all the standards covered by the licence agreement at issue.
- 89 It is undisputed that the Defendant is the proprietor of a whole series of patents (that are in effect, see German Federal Court of Justice, GRUR 2020, 961 margin no. 65 – FRAND Objection I) which form the subject matter of the standards at issue in this case and cover both the German and European internal markets. Unlike in the German Federal Court of Justice's decision "FRAND Objection I", the present case does not concern just one single patent.
- 90 In this regard, the Defendant pleads [... deleted due to a confidentiality order...]. The Panel is already satisfied on this basis that without using the patents at issue, the Claimant cannot comply with the relevant mandatory provisions of the standards in question.
- 91 (Exceptional) grounds that would preclude the Defendant from holding a dominant market position (see German Federal Court of Justice, GRUR 2020, 961 margin no. 61 – FRAND Objection I; German Federal Court of Justice, GRUR 2021, 585 margin no. 51 – FRAND Objection II) are not apparent.
- 92 2. However, the Defendant cannot be accused of abusing this dominant market position by refusing to accept the Claimant's offers. In any event, the licence fee proposed in the Claimant's second auxiliary request is not at the upper end of the FRAND corridor. In fact, it is conceivable that the Defendant might make offers that meet FRAND terms and exceed the licence fee proposed in the Claimant's second auxiliary request.
- 93 a. In its decision in the case "Huawei v ZTE", the ECJ held that a commitment to grant licences on FRAND terms gives rise to a legitimate expectation on the part of third parties that the proprietor of the SEP will in fact grant them licences on those terms. Consequently, a refusal by the proprietor of the SEP to grant a licence on these terms may in principle constitute abuse within the meaning of Article 102 TFEU (ECJ, GRUR 2015, 764, margin no. 53 – Huawei v ZTE; Karlsruhe Higher Regional Court, GRUR 2020, 166 margin no. 90). Abuse may also be found where the patent proprietor can be accused of failing to make sufficient efforts to fulfil the special responsibility associated with its dominant market

position and enable an infringer that is willing to take a licence in principle to enter into such an agreement on reasonable terms (German Federal Court of Justice, GRUR 2020, 961 margin no. 74 – FRAND Objection I; German Federal Court of Justice, GRUR 2021, 585 margin no. 53 – FRAND Objection II; Düsseldorf Higher Regional Court, GRUR 2022, 1136 margin no. 148). Such a situation can take various forms. For one, under these principles, abuse may be where the patent proprietor refuses to make any offer at all to the licence seeker, or if the patent proprietor persistently makes offers to the licence seeker that are not FRAND.

- 94 Insofar as the Defendant argued at the hearing that it follows from the German Federal Court of Justice's "FRAND Objection II" decision (GRUR 2021, 585 margin no. 54) that an offer which is not FRAND does not in itself constitute abuse, this is, in principle, correct. In this decision, the German Federal Court of Justice stated that an abuse of a patent proprietor's dominant market position does not "in principle" arise from contractual terms offered by the patent proprietor before or at the start of negotiations. However, in the view of the German Federal Court of Justice, an abuse of market power also arises from the refusal to grant requested access to the invention as such, or from imposing unreasonable conditions for such access, from which the patent proprietor is unwilling to deviate even at the end of negotiations; in other words, an abuse of market power ultimately arises from the refusal to offer the conclusion of a licence agreement on FRAND terms to the licence seeker as the result of a negotiation process.
- 95 Assuming that the Claimant's offers are FRAND but the Defendant's offer is not, this would also constitute an abuse of a dominant market position by the Defendant in the view of the Panel. If the patent proprietor makes an offer to the licence seeker that is not FRAND and at the same time refuses right up to the last moment to accept the licence seeker's FRAND offer or to submit a FRAND offer of its own, the conditions set out by the German Federal Court of Justice are met.
- 96 b. As outlined above, however, the action sought by the licence seeker for conclusion of an agreement can only succeed if the offer to enter into an agreement that it submitted to the patent proprietor – and which the patent proprietor rejected – is at the upper end of the "FRAND corridor". The patent proprietor is only under an obligation to contract to the extent that it can rectify the situation of abuse at any time by making a counter-offer that also falls within the scope of the corridor. The licence seeker then need only accept this offer from the patent proprietor.
- 97 c. Where the dispute concerns only the licence rate, the Court must then examine, in particular, whether (1) the licence seeker's offer – unlike that of the patent proprietor – meets FRAND terms and (2) the licence seeker's offer is at the upper end of the FRAND corridor or even exceeds it.
- 98 However, whether or not the patent proprietor is otherwise to be regarded as willing to grant a licence is not relevant in the present case. The only issue to be decided in this case is whether the Claimant can compel the Defendant to enter into the licence agreement at issue. Since, as set out above, the patent proprietor is already abusing its dominant market position if it persistently fails to make a FRAND-compliant offer and does not accept an offer by the licence seeker that meets the requirements set out above, the only issue at stake is ultimately whether the licence rate at issue between the parties (both in the main

request and in the auxiliary requests) is not FRAND-compliant. Nevertheless, an action for conclusion of an agreement must also be dismissed if the patent proprietor has shown a complete willingness to grant a licence – excepting the licence fee, which is the subject of dispute between the parties – but the licence seeker's offer is not FRAND-compliant or is too low.

- 99 d. In any event, the offers made by the Claimant in its main and auxiliary requests are not at the upper end of the FRAND corridor.
- 100 aa. What constitutes reasonable and non-discriminatory terms in a licence agreement in any given case usually depends on a variety of factors. As in other cases of (potential) abuse of a dominant market position, the dominant patent proprietor is not required as a matter of principle to grant licences on the basis of a "uniform tariff" that grants the same terms to all users. Nor does such an obligation arise from the FRAND voluntary commitment. This serves to ensure effective access to the standard, a requirement which is already met provided that the specific prohibitions on discrimination are observed and the interests of both contractual parties are taken into account in a balanced manner (German Federal Court of Justice, GRUR 2020, 961 margin no. 81 – FRAND Objection I).
- 101 bb. The parties are at odds in particular over whether the [year] Licence should be used as the comparison licence for calculating the licence fee or whether it should be calculated using the top-down approach preferred by the Defendant. In this case, the Panel has made the decision that the [year] Licence is not to be used.
- 102 (1) There is essentially consensus in case law and legal literature that the use of comparison licences is the preferred method for calculating the licence fee (see Düsseldorf Higher Regional Court, decision of 17 November 2016 – I-15 U 66/15, GRUR-RS 2016, 21067 margin no. 16; Karlsruhe Higher Regional Court, judgment dated 2 February 2022 – 6 U 149/20, GRUR-RS 2022, 9468 margin no. 194; Düsseldorf Regional Court, judgment dated 21 December 2021 – 4c O 42/20, GRUR-RS 2021, 50360 margin no. 228; Düsseldorf Regional Court, judgment dated 31 March 2016 – 4 a O 126/14, GRUR-RS 2016, 08040 margin no. 159 f.; Munich I Regional Court, judgment dated 30 September 2020 – 21 O 13026/19, GRUR-RS 2020, 50638 margin no. 199, 213 ff.; Munich I Regional Court, decision dated 14 July 2025 – 7 O 64/25, 7 O 2750/25, Exhibit B21, pages 6, 9: Top-down approach fundamentally problematic; Kühnen, Handbuch der Patentverletzung, chapter E, margin no. 605; Haedicke, GRUR Int. 2017, 661, 667; Saballek, GRUR 2023, 945, 947; with reservations Kurtz/Straub, GRUR 2018, 136: only an upper limit, as contracts may have been concluded in abuse of rights; see also German Federal Court of Justice, GRUR 2021, 585 margin no. 47: Discrimination due to a significant deviation from comparable licences). By contrast, a determination made without reference to any precedent should only be possible in the alternative if there is not even a licence agreement that is similar in substance or scope, is meaningful and can be used as a benchmark for a licence provision (Kühnen, Handbuch der Patentverletzung, chapter E, margin no. 605).
- 103 In this regard, Munich I Regional Court takes the view (Munich I Regional Court, decision dated 14 July 2025 – 7 O 64/25, 7 O 2750/25, Exhibit B21, pages 7 ff.) that the relevant date is the date on which the agreement was entered into, while compensation for past use should generally be disregarded, as licence payments for past use can no longer be offset

by a surcharge on the products. The key criteria are the licensee's comparable size and product range, the scope and duration of the licence and the quantities involved. In particular, previous agreements between the parties are expected to play a significant role if there is no indication that the circumstances at the time the agreement was entered into are not comparable to those at the time when the continuation is being discussed. However, there should be no entitlement to the same terms, as the parties had the option of agreeing to a longer term in the previous agreement. It should be borne in mind that at least one of the parties does not wish the terms of the old agreement to continue to apply, which is why the focus should be on the arguments each party puts forward against their continued application or on the specific points where the parties seek substantial changes.

- 104 In the view of Düsseldorf Regional Court, it is necessary for the agreements to be "identical" in substance and, in particular, to relate to the same product market (Düsseldorf Regional Court, judgment of 21 December 2021 – 4c O 42/20, GRUR-RS 2021, 50360 margin no. 199: not satisfied where the comparison licence concerns the mobile telecommunications market and coverage for TV sets is requested) and to not differ in their regulatory content (Düsseldorf Regional Court, judgment dated 21 December 2021 – 4c O 42/20, GRUR-RS 2021, margin no. 202).
- 105 Furthermore, Düsseldorf Higher Regional Court takes the view that, by making the very first licensing transaction, the patent proprietor commits to a specific licensing model which is then legally binding, because it is only possible to deviate from the model once adopted if and to the extent that this does not result in inadmissible discrimination against subsequent or earlier licensees. In the initial licensing process, therefore, the priority is to grant licences that are "fair" and "reasonable". If the terms chosen at the time the licences are initially granted meet the requirements for non-exploitative content, the focus for all subsequent licensing moves to prohibiting discrimination, which – provided there are no different licensing circumstances from these – prevents any deviation of relevance to the competition, either higher or lower, from the licence level established by the initial licensing (Düsseldorf Higher Regional Court, judgment dated 22 March 2019 – 2 U 31/16, GRUR-RS 2019, 6087 margin no. 237; criticism by Dornis, GRUR 2020, 690). However, the patent proprietor should be able to reorient its strategy by terminating all licence agreements at a specific point in time and, where appropriate, to impose new licence terms or terms calculated differently (Düsseldorf Higher Regional Court, judgment dated 22 March 2019 – 2 U 31/16, GRUR-RS 2019, 6087 margin no. 243; Kühnen, op. cit., chapter E margin no. 432).
- 106 (2) In applying these principles, the [year] Licence is not to be used as a comparison licence.
- 107 One argument against comparability is that the [... deleted due to a confidentiality order...] [year] Licence [... deleted due to a confidentiality order...]. [... deleted due to a confidentiality order...] It is clear, however, that the parties were unable to agree on a longer term; in any case, it can be inferred that [... deleted due to a confidentiality order...] did not wish to be bound beyond this period.
- 108 Another significant difference lies in the scope of the patent licence [... deleted due to a confidentiality order...]. In this regard, the parties would have been perfectly entitled to [... deleted due to a confidentiality order...].

109 In this regard, the Panel considered whether the fact that mobile communications standards are currently evolving, with some standards becoming obsolete (such as 2G and 3G) and new standards (such as 5G and 6G) being developed, could give rise to comparability. However, it is not a matter of dispute between the parties that [... deleted due to a confidentiality order...]. Consequently, the evolution of the standards as described does not have a sufficient impact, at least for the time being. Ultimately, however, such a decision will have to remain at the discretion of the patent proprietor, even when FRAND terms are taken into account.

110 The Panel also took the term of the licence agreement being sought into account. [... deleted due to a confidentiality order...]

111 Finally, it had to be taken into account that [... deleted due to a confidentiality order...].

112 Insofar as the Defendant pleads [... deleted due to a confidentiality order...], this is ultimately irrelevant, [... deleted due to a confidentiality order...].

113 However, the other terms of the Claimant's offer, as set out in Exhibit GMW1, are irrelevant. In the Panel's view, factors in a licence agreement other than the licence fee may also mean that an offer cannot be regarded as FRAND-compliant. Secondary provisions such as the agreement of certain conditions, the applicable law, the place of jurisdiction, etc., may well be unreasonable or ultimately left to the discretion of the patent proprietor in individual cases, [... deleted due to a confidentiality order...]. In the event of a dispute [... deleted due to a confidentiality order...]. [... deleted due to a confidentiality order...] – raised substantiated or substantial objections.

114 cc. The Panel cannot rely on other agreements either for the purposes of calculations under the comparison model.

115 Insofar as the Defendant argues that [... deleted due to a confidentiality order...], the Panel does not accept this argument. This is because, in accordance with the principles set out above, these agreements are not comparable to the present dispute. In this regard, [... deleted due to a confidentiality order...].

116 The parties further agree as a result that [... deleted due to a confidentiality order...] cannot be used as a basis for comparison.

117 [... deleted due to a confidentiality order...]

118 dd. Accordingly, the Claimant's offers are to be assessed by a different standard than the [year] Licence. As the only one between the parties – though this is highly contentious – [... deleted due to a confidentiality order...] in accordance with the so-called top-down principle.

119 [... deleted due to a confidentiality order...] (see in this regard Munich I Regional Court, decision dated 14 July 2025 – 7 O 64/25, 7 O 2750/25, Exhibit B21: "[Only] if the parties are discussing exclusively a cross-licence may the specific cross-licence be examined by the Court as an exception").

120 Regardless of this, however, the Panel is satisfied that the Claimant's offers [... deleted due to a confidentiality order...] do not meet the standard set out above, namely an offer "at the upper end" of the FRAND corridor or even above it.

- 121 In this regard, the licence fee that may be owed may be estimated, at least in the context of the review of the Claimant's offers, in accordance with section 287 German Code of Civil Procedure (ZPO). This is because determining FRAND terms is not a process carried out with mathematical precision, but rather a decision that can only be made by approximation and which, in the interests of being resolved with the required speed, necessarily relies on judgement and estimates (Kühnen, op. cit., chapter E, margin no. 598 f.; Düsseldorf Higher Regional Court, GRUR-RS 2016, 21067 margin no. 16, 26). It is therefore necessary, but also sufficient, that – taking all relevant circumstances into account – the estimate is internally consistent, comprehensible and economically plausible and leads to realistic results (Stuttgart Higher Regional Court, NZKart 2025, 658 margin no. 130), i.e. is not left "up in the air" (see German Federal Court of Justice, NZKart 2024, 639 margin no. 15 with further references).
- 122 Such an estimate is also possible or appropriate in this case because [... deleted due to a confidentiality order...] obtaining an expert opinion would take a considerable amount of time and a result determined by an expert would ultimately also be subject to considerable uncertainty, since [... deleted due to a confidentiality order...] for the valuation would have to be based on certain fundamental assumptions in each case, meaning that ultimately a FRAND corridor could only be established with a not insignificant margin of tolerance. [... deleted due to a confidentiality order...]
- 123 The Panel therefore considers that, even if the estimate under section 287 German Code of Civil Procedure (ZPO) is applied, the amount sought by the Claimant in its second auxiliary request does not represent the "upper end" of FRAND; rather, the Defendant may, within the scope of the discretion afforded to it within the FRAND corridor, demand an amount in excess of that figure. Consequently, neither the Claimant's main request nor its two auxiliary requests can succeed.
- 124 (1) In this regard, the Panel will initially base its assessment on the unit and turnover figures submitted by the Claimant. Admittedly, these are individually disputed between the parties. However, if the action is without merit even on the basis of the figures put forward by the Claimant and accepted to its benefit, the Defendant's challenge is irrelevant in this regard.
- 125 [... deleted due to a confidentiality order...]
- 126 The Panel estimates [... deleted due to a confidentiality order...].
- 127 [... deleted due to a confidentiality order...]
- 128 The following can be seen [... deleted due to a confidentiality order...].
- 129 (2) [... deleted due to a confidentiality order...] for individual devices should not necessarily be based on the net sale price. In this regard, the Panel concurs with Munich I Regional Court in assuming that a not insignificant portion of the value of a device purchased by a customer is based not on the supported standards, but rather on quality expectations, the device's performance, the brand, etc. (see Munich I Regional Court, decision dated 14 July 2025 – 7 O 64/25, 7 O 2750/25, Exhibit B21: "*This is because there are considerable price differences between the end products, which are not due to improved standard functionality, but due to a particularly attractive brand, a particularly high-quality camera or particularly functional software. It would not be compatible with the idea of a fair balance of interests if the manufacturer of high-quality branded products had to pay a*

higher price for the same functionality as the manufacturer of cheaper or of the lowest-priced products. If this were to lead to the price of the cheapest products having to be increased, this would have to be accepted.") Therefore, an average price must be calculated. In this regard, the Defendant's private expert has [... deleted due to a confidentiality order...]. For the purposes of the subsequent calculation, the Panel considers a figure of USD [... deleted due to a confidentiality order...] per unit to be appropriate.

130 (3) The parties are also in dispute over [... deleted due to a confidentiality order...]. In this regard, the Defendant is starting from a rate of [... deleted due to a confidentiality order...], while the Claimant is willing, at most, to accept [... deleted due to a confidentiality order...] as reasonable. For the purposes of calculation, the Panel will hereafter assume a value of [... deleted due to a confidentiality order...], which favours the Claimant, without making a decision on whether the Defendant might also be permitted to apply a higher value within the FRAND corridor.

131 (4) [... deleted due to a confidentiality order...]. The Claimant is correct in pointing out that this part of the calculation is subject to particularly high levels of uncertainty. This is because a whole range of problematic issues come into play in the assessment. This makes it unclear how many of the parties' patents are deemed legally valid and what role they play in each standard. Furthermore, the geographical scope of the respective patents must be taken into account.

132 This nuanced assessment cannot be accurately reflected in the valuation carried out under section 287 German Code of Civil Procedure (*ZPO*). Rather, the process should be simplified in accordance with the principles set out above and the valuation should be made on that basis.

133 According to the figures submitted by the Claimant as set out in Exhibit GMW13, page 90, which are individually disputed between the parties, [... deleted due to a confidentiality order...], though the other standards are to be disregarded for the purposes of the calculation, as the parties are ultimately primarily concerned with the patents set out below, which represent the essential value of the Party's patent portfolios to be licensed:

134 [... deleted due to a confidentiality order...]

135 In this regard, the Panel assumes that the average patent share of both parties is approximately [... deleted due to a confidentiality order...].

136 (5) Based on these figures, the following conclusions can be drawn:

137 [... deleted due to a confidentiality order...]

138 The Panel holds that it has tended to make assumptions in this regard that favour the Claimant and that the upper limit of the FRAND corridor has therefore not been reached.

139 Even if the Panel were to assume that, for example, the Defendant's share of the patents in the standards should be estimated significantly lower – say, at only [... deleted due to a confidentiality order...] – the Claimant's offer, as set out in its second auxiliary request, would still be insufficient: [... deleted due to a confidentiality order...]

140

141 Even from this calculation – which admittedly has been significantly simplified within the framework of section 287 German Code of Civil Procedure (*ZPO*) – it is clear that the Claimant's offer, even in the second auxiliary request, cannot represent the upper end of the FRAND corridor, particularly as the Defendant might be entitled within the scope of this corridor, for example, to set an ARB value above [... deleted due to a confidentiality order...] or assume a higher average price per unit.

142 The Panel is aware of the limitations and simplifications in the calculation set out above. However, it considers the amounts claimed to be sufficient under the relevant standard set out in section 287 German Code of Civil Procedure (*ZPO*). In reaching this conclusion, the Panel relied on the figures provided by the parties and opted for the top-down approach – a method which, while not generally preferable to the comparative principle, is nevertheless fundamentally acknowledged and was the only one available in this case – meaning that, in the Panel's view, the figures calculated here are not left "up in the air". This is all the more true given that in each case the Panel has set the figures predominantly to the Claimant's benefit and has compared them or verified their plausibility using comparative calculations. In this regard, the Panel has applied different figures in respect of the parameters at issue between the parties (unit price, ARB licence rate, share of the standard) and, having considered all the evidence, concludes that the FRAND corridor has not been exhausted by the Claimant's second auxiliary request.

143 e. In any event, the issues in dispute between the parties – namely whether the Claimant has demonstrated a willingness to take a licence and the Defendant a willingness to grant one (see Munich I Regional Court, judgment of 12 April 2024 – 21 O 16085/22, GRUR-RS 2024, 48852 margin no. 154; furthermore German Federal Court of Justice, GRUR 2020, 961 margin no. 111 – FRAND Objection I: "despite the patent infringer's willingness to take a licence") and whether the Claimant has provided sufficient security (see in this regard, with divergent views, Munich Higher Regional Court, GRUR 2025, 738 margin no. 139: Licence seeker must make the payment of security amounting to the patent proprietor's claim; Munich Regional Court I, Exhibit B21, p. 5: "Payment of security is not a mandatory prerequisite for the patent user to demonstrate their willingness to take a licence" but a (smaller) partial payment must be made; left open by the German Federal Court of Justice, judgment of 27 January 2026 – KZR 10/25, press release no. 021/2026 of 27 January 2026 – FRAND Objection III), were irrelevant.

III.

144 1. The decision on the costs is made pursuant to section 91 (1) German Code of Civil Procedure (*ZPO*), as the Claimant has not prevailed in any respect.

145 2. The decision regarding provisional enforceability is derived from section 709 German Code of Civil Procedure (*ZPO*).

146 3. The Defendant was not required to be given a further opportunity to be heard in response to the Claimant's written statement of 16 January 2026. Nor was it necessary to resume the hearing in accordance with section 156 German Code of Civil Procedure (*ZPO*). This is because the written statement does not contain any new factual arguments relevant to the decision.

147 4. The amount in dispute is set at EUR [...] (section 3 German Code of Civil Procedure

(ZPO)).