Unified Patent Court
Einheitliches Patentgericht
Juridiction unifiée du brevet

Action n°: UPC CFI 230 /2024

Revocation action 27358/2024

DECISION

of the Court of First Instance of the Unified Patent Court

Central division Paris Seat (Section 1)
delivered on 30 April 2025
concerning EP 1 994 067 B1

1. A broad, general term used in the main claim is not to be limited to an understanding derived from the more specific or narrower features disclosed in a dependant claim or in the description. Instead, the dependant claim and/or the description merely indicate possible embodiments of the patented invention which may provide for additional advantages.

2. Embodiments generally serve to describe options for realizing the invention and therefore do not permit a restrictive interpretation of a more general patent claim. Embodiments mentioned in the patent description only permit the conclusion that they fall under the claim; they do not restrict the scope of the patent claim.

KEYWORDS: Revocation, claim interpretation, non-limiting embodiments, inventive step, starting point, obviousness, extension of scope

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PANEL
Panel 1 of the Central Division (Paris Seat)

Presiding judge	François Thomas
Legally qualified judge, judge rapporteur	Maximilian Haedicke
Technically qualified judge	Gérard Myon

LANGUAGE OF PROCEEDINGS
English

PATENT AT ISSUE
European patent **EP 1 994 067 B1,** hereinafter referred to as "EP 067" or as "the Patent".

DECIDING JUDGES
This decision has been delivered by the presiding judge **François Thomas**, the legally qualified judge and judge-rapporteur **Maximilian Haedicke** and the technically qualified judge **Gérard Myon**.

DATE OF THE ORAL HEARING

21 March 2025

1 The dispute

1.1 On 18 April 2024, Defendant in this revocation action filed for an application for provisional measures at the UPC Local Division Hamburg, against Claimant in this revocation action for using a method and system at the European Football Championships (UEFA EURO 2024) in Germany, which Defendant believes falls under the scope of protection of the Patent EP 067. By decision of 3 June 2024 (UPC_CFI_151/2024), the Hamburg Local Division denied Ballinno's application. The Hamburg Local Division set the value of the dispute to EUR 500,000. Ballinno filed an appeal against the order of the Hamburg Local Division. The appeal is pending under number 36389/2024.

1.2 On 17 May 2024, Claimant filed this revocation action[1] dated 5 May 2024, against Defendant at the Paris Central Division of the Unified Patent Court requesting the Court to revoke European Patent EP 067.

1.3 A corrected Statement of Defence to Revocation dated 26 July 2024 was filed on 5 August 2024 by Defendant. On 26 July 2024, an Application to amend the Patent was filed by Defendant (No. App_43837/2024). Claimant filed a Reply to an Application to amend the Patent on 27 September 2024. Also on 27 September 2024, Claimant submitted a Reply to the Defence. On 28 October 2024; Defendant filed a Rejoinder to the Reply to the Defense to Revocation and Reply to the Defense to the Application to Amend the Patent and subsequent Request to amend the patent. On 28 November 2024, Claimant filed a Reply to the Defence to the Application to amend the Patent.

1.4 With submission of 26 July 2024 (No. App_43845/2024), Defendant requested that the Court stays the revocation proceedings until four weeks after the UPC Court of Appeal has given its judgment with grounds in appeal case 36389/2024. This request was denied by the judge rapporteur and upon request to review (Rule 333 RoP) it was also denied by the full panel on 14 October 2024 (ORD_53581/2024 No. App_49450/2024).

[1] The Statement for Revocation, Defence to Revocation, Reply to the Defence to Revocation and Rejoinder to the Reply to the Defence to Revocation are herein referred to as ´**SfR**´, ´**DtR**´, ´**RtD**´ and ´**R**´, respectively.

1.5 On 13 August 2024; Claimant submitted a request for procedural security (No. App_46766/2024). The judge-rapporteur referred the request to the panel, Rule 331.2 RoP. The Court ordered Defendant to provide security for the legal costs of Claimant in the (total) amount of EUR 25.000 (ORD_47273/2024). The security was duly paid.

1.6 On 30 January 2025, the interim conference was held.

1.7 After the interim conference, the parties were given the opportunity to comment by written submission on certain issues that were discussed in the interim conference. By order of 2 March 2025, the Court – inter alia – set out the order allowing Auxiliary Requests 1 and 3 and rejected Defendant's request to disregard the argument according to which claims 7 and 15 are not limited to football as submitted in para. 45 of Claimant's Reply (ORD_68879/2024).

1.8 The oral hearing was held on 21 March 2025.

1.9 For the submissions of the parties and previous orders issued by the Court, reference is made to the case file in the Case Management System.

2 The Patent

2.1 The Patent EP 1 944 067 B1, Exhibit BP1, is entitled 'Method and system for detecting an offside situation'.

2.2 The Patent arose out of European patent application 07000396.7 filed on 10 January 2007 (Exhibit BP9), published as EP 1 944 067 A1 on 16 July 2008 (Exhibit VB05). The grant of the Patent was published on 26 October 2011. No opposition was filed.

2.3 Registered owner of the Patent is Defendant.

2.4 According to the national registers, among the Contracting States of the UPC, the Patent is in force in Germany and the Netherlands.

2.5 Claim 1 of the Patent, as granted, reads:

"Method for detecting a contact with a ball by a first player in games and sports, the method comprising:

- *sensing a sound signal produced by the ball (Ba);*
- *processing the sound signal in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player;*

- *if the processing determines that the ball is contacted by the first player, generating a detection signal;*
- *supplying the detection signal to a signaling system; and*
- *generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal."*

2.6 Claim 3 of the Patent, as granted, reads:

"Method according to any of the preceding claims, wherein generating a detection signal comprises:

- *compiling a content signal of the detection signal, the content signal of the detection signal comprising at least one element of the group comprising detected sound information data and a ball identification code."*

2.7 Claim 7 of the Patent, as granted, reads:

"Method according to any of the preceding claims, wherein the contact with the ball by the first player is a kick of the ball."

2.8 Claim 8 of the Patent, as granted, reads:

"System for detecting a contact with a ball by a first player in games and sports, the system comprising:

- *a detection signal generator comprising a sound sensing means (SM), in particular a microphone, for sensing a sound signal produced by the ball (Ba), and a sound processing means (PM) coupled to the sound sensing means for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player, the detection signal generator generating a detection signal if the sound processing means determines that the ball is contacted by the first player;*
- *a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system;*

- *an observable signal generator comprised in the signaling system for generating, in response to receipt of the detection signal, an observable signal to be observed by a referee."*

2.9 Claim 10 of the Patent, as granted, reads:

"System according to any one of the claims 8 - 9, wherein the detection signal transmission system is a wireless transmission system, in particular operating at a frequency that is suitable to transmit over a distance of at least the distance of a diagonal of a play field."

2.10 Claim 15 of the Patent, as granted, reads:

"System according to any of claims 8-14, wherein the contact with the ball by the first player is a kick of the ball."

3 Requests

3.1 Claimant requests:

1. to revoke the European Patent EP 1 944 067 in the extent of claims 1, 3, 7, 8, 10 and 15 for the territory of the UPC member states Germany and the Netherlands as well as, if applicable, for the territories of all other UPC member states in which the Patent-in-Suit was validated.
2. to order the Proprietor to pay the costs of the proceedings**.**

3.2 Defendant requests:

1. to dismiss Claimant's claim for revocation of the Patent, or (alternatively) to maintain the Patent in the form of one of the auxiliary requests;
2. to dismiss Claimant's claim for compensation of legal costs; and
3. to order Claimant to compensate for Defendant's reasonable and proportionate legal costs.

3.3 Reformulation of Claimant requests

During the haring of 21 March and upon invitation by the Court, Claimant reformulated its revocation request to cover the following countries: Germany and the Netherlands.

3.4 Regarding the value of the claim Claimant suggests to set the value of the case to EUR 2,000,000. In case the Court intends to apply Sec. II.2.b)(ii) of the Guidelines and uses the decision of the LD Hamburg which set the value to €500,000 as starting point, the value in litigation should not be less than EUR 1,000,000. Defendant suggests to set the value to EUR 500,000.

4 Arguments

4.1 Claimant states that the claimed invention is not valid for several reasons. Claimant argues that the following reasons for revocation apply:

- lack of novelty (Art. 54 EPC; Art. 65(1), (2) UPCA in combination with Art. 138(1)(a) EPC), against the main request,
- lack of inventive step (Art. 56 EPC; Art. 65(1), (2) UPCA in combination with Art. 138(1)(a) EPC), against the main request and all auxiliary requests, and
- added matter (Article 138(1)(c) EPC, with reference to Articles 76(1) and 123(2) EPC), against the second auxiliary request.

4.2 Defendant opposes this view and states that the claimed invention is valid.

GROUNDS FOR THE DECISION

5 Technical introduction

5.1 The patent describes a method and a system for detecting a contact with a ball by a player in games and sports, such as for detecting an offside situation during a game of football (soccer).

5.2 The patent description illustrates the patented invention by referring to football (soccer), in the following: ”football”. In football usually at least two referees (a referee and a linesman) are to referee the play. An important rule to be observed and refereed is “offside”. Offside may occur if a player, usually an offensive player, of a first team is located between the goalkeeper and all the other players of the second team. If another player of the first team passes the ball to the first-mentioned player at the moment that the first-mentioned player is between the goalkeeper and the other players, the first-mentioned player is deemed to be offside. The linesman is to detect such a situation and to raise the flag to indicate to the referee that the first-mentioned player is offside.

5.3 In order to determine whether the first-mentioned player is offside, the linesman needs to determine a position of the first-mentioned player of the first team with respect to a position of the players of the second team exactly at the moment when another player of the first team kicks the ball towards the first-mentioned player.

5.4 However, usually, the ball is not near the first-mentioned player and therefore, the linesman cannot see the first-mentioned player and the ball at a single glance. Therefore, the linesman commonly keeps the ball in sight and as soon as the ball is kicked, he changes his sight towards the first-mentioned player. Although the change of sight occurs in a very short period, e.g. several milliseconds, the position of the first-mentioned player and/or a number of the players of the second team may have changed considerably. Further, other players may obstruct the sight of the kick of the ball. Also, depending on the position of the referee with respect to the first-mentioned player of the first team and some of the players of the second team, it may be that the linesman misjudges the relative position of the players.

5.5 According to the Patent (para. [0005]), it is an object of the present invention to provide a method and system for assisting the referee and linesman in detecting a contact with the ball by a player, such as for correctly judging offside.

6 The claimed subject matter

6.1 Claim 1 of the Patent can be divided into the following features:

1. *Method for detecting a contact with a ball by a first player in games and sports*

1.1 *[the method comprising] sensing a sound signal produced by the ball;*

1.2 *[the method comprising] processing the sound signal in order to determine whether there is a contact with the ball by the first player,*

> ***1.2.1*** *wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player*

1.3 *[the method comprising] if the processing determines that the ball is contacted by the first player, generating a detection signal;*

1.4 *[the method comprising] supplying the detection signal to a signaling system;*

1.5 *[the method comprising] generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal.*

6.2 A corresponding system is defined in independent claim 8 which may be structured as follows:

8. *System for detecting a contact with a ball by a first player in games and sports*

8.1 *[the system comprising] a detection signal generator*

8.1.1 *[the detection signal generator] comprising a sound sensing means (SM), in particular a microphone, for sensing a sound signal produced by the ball (Ba),*

8.1.2 *and [the detection signal generator comprising] a sound processing means (PM) coupled to the sound sensing means for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player,*

8.1.2.1 *wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player,*

8.1.3 *the detection signal generator generating a detection signal if the sound processing means determines that the ball is contacted by the first player;*

8.2 *[the system comprising] a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system;*

8.3 *[the system comprising] an observable signal generator comprised in the signaling system for generating, in response to receipt of the detection signal, an observable signal to be observed by a referee.*

6.3 Some features of claims 1 and 8 of the Patent require interpretation.

Legal framework

6.4 The Court of Appeal of the UPC has laid down the following legal framework for the interpretation of patent claims (Order dated 26 February 2024 in UPC_CoA_335/2023, *NanoString/10x Genomics*, p. 26-27 of the original

German language version, also see Order dated 13 May 2024 in UPC_CoA_1/2024, *VusionGroup/Hanshow*).

6.5 In accordance with Art. 69 EPC and the Protocol on its interpretation, a patent claim is not only the starting point, but the decisive basis for determining the scope of protection of a European patent. The interpretation of a patent claim does not depend solely on the strict, literal meaning of the wording used. Rather, the description and the drawings must always be used as explanatory aids for the interpretation of the patent claim and not only as a mean to resolve any ambiguities in the patent claim. However, this does not mean that the patent claim merely serves as a guideline and that its subject-matter also extends to what, after examination of the description and drawings, appears to be the subject-matter for which the patent proprietor seeks protection.

6.6 The patent claim is to be interpreted from the point of view of a person skilled in the art. When interpreting a patent claim, the person skilled in the art does not apply a philological understanding, but determines the technical meaning of the terms used with the aid of the description and the drawings. A feature in a patent claim is always to be interpreted in light of the claim as a whole (Order dated 13 May 2024, in UPC_CoA_1/2024, *VusionGroup/Hanshow*, point 29). From the function of the individual features in the context of the patent claim as a whole, it must be deduced which technical function these features actually have both individually and as a whole. The description and the drawings may show that the patent specification defines terms independently and, in this respect, may represent a patent's own lexicon. Even if terms used in the patent deviate from general usage, it may therefore be that ultimately the meaning of the terms resulting from the patent specification is authoritative.

6.7 In applying these principles, the aim is to combine adequate protection for the patent proprietor with sufficient legal certainty for third parties.

6.8 The relevant point in time for interpreting a patent claim for the assessment of validity is the filing (or priority) date of the application that led to the patent.

The person skilled in the art

6.9 The person skilled in the art (hereinafter: *skilled person*) is a legal fiction which, in the interests of legal certainty, forms a standardized basis for the assessment of the legal concepts of "prior art" and "inventive step". The

skilled person represents the average expert who is typically active in the technical field of the invention, has had the usual prior training and has acquired average knowledge, skills and practical experience.

6.10 According to Defendant (SoD mn 75), the skilled person is an electrical engineer involved in development of technical improvements for the support refereeing football matches. He/She is equipped with a good understanding of the rules of football and the decisions referees in football need to make on a regular basis. He/she also has a broad understanding of technologies that are regularly used in the assistance of refereeing football matches.

6.11 According to Claimant (RtD mn 26), the skilled person responsible is an electrical engineer involved in development of technical improvements for contact detection in ball sports.

6.12 The reference to refereeing in the definition of Defendant is consistent with para. [0005] of the patent. However, since paras. [0001] and [0005] are not limited to football, the skilled person's knowledge is not limited to this game.

6.13 Both parties agree that the skilled person is an electrical engineer. The Court considers that there is no limitation to a given sport in the education of an electrical engineer.

6.14 The skilled person who works in the field of technical improvements for the support of refereeing sports will be knowledgeable not only with respect to football, but will take other ball sports into consideration, too. The skilled person will apply the sensing, processing and signal generation technology in any ball sports, in which the technology to ascertain the contact between ball and player can support the refereeing activities.

6.15 In the opinion of the Court, the skilled person is an electrical engineer with a knowledge in contact detection in the field of ball sports and the corresponding rules of ball sports and games.

Interpretation of features of claim 1

6.16 ***Feature 1.*** *Method for detecting a contact with a ball by a first player in games and sports*

6.17 This feature defines the method for detecting a contact with a ball by a player in games and sports. The feature, by its wording, defines a "[m]ethod for detecting a contact with a ball by a first player in games and sports", not a method for football in general or offside detection in particular. The

wording does not provide any limitation to football. It refers to ball sports and even more generally, to games. Feature 1 does, by its wording, neither define the nature of the contact with the ball nor in which ball game or ball sport the invention is used. The claim language especially does not mention football or the football offside rules. It uses the much more general terms “games and sports”.

6.18 The skilled person will understand feature 1 as not being limited to football not only due to the clear wording, but also with regard to para. [0005] of the patent description. This part of the description makes it expressly clear that offside detection (in football) is one application of the claimed technology. This paragraph teaches that the patented method is used for assisting the referee and linesman in detecting a contact with the ball by the player (“such as for correctly judging offside” in para. [0005]).

6.19 Defendant states that the “first player”, in accordance with the Patent, is a football player that is about to be in contact with the ball, which contact may possibly lead to an offside situation (cf. §§ 16-18 SoD). Defendant further alleges that the Patent teaches that the moment of contact between the ball and the first player must be automatically detected in order to correctly make the call for offside (see also paras. [0001]-[0005]). The first player therefore cannot be anyone but the player which contact with the ball may cause for an offside situation. In the oral hearing Defendant emphasized that the patent description does not only serve to resolve ambiguities but is to be taken seriously at all times.

6.20 There is no ambiguity in the patent claims, which would need to be resolved. For the skilled person, it is clear that the patent description refers not only to the offside situation but also allows for several other ways of using the invention. The skilled person, who is familiar with rules of sports and games, understands that there are several games and sports and several incidents in which the referee needs to decide whether a “first player” had contact with the ball. No information is provided in claim 1 in order to specify who the first player is, apart from the fact that the same first player is mentioned in features 1, 1.2 and 1.3. The skilled person understands that the patented method serves to assist the referee and linesman in detecting a contact with the ball by any player, who can be qualified as a “first player”, be it to establish an offside situation in football or be it to establish certain occurrences according to the rules of other ball sports.

6.21 A limitation to offside situations resulting from the description does not allow a restrictive and limiting interpretation of the patent claim. The patent claim, which does not contain such limitation, takes precedence over the description, which makes reference to the specific embodiment. The skilled person is aware that embodiments generally serve to describe options for realizing the invention and therefore do not generally permit a restrictive interpretation of a more general patent claim. Embodiments mentioned in the patent description only permit the conclusion that they fall under the claim; they do not restrict the scope of the patent claim.

6.22 Defendant further states that its view is confirmed by the wording of claim 2, which likewise refers to the "second player" as the player whose position must be detected. According to Defendant, it is clear that this second player is the player whose position must be detected as he might be in offside position, whereas the first player is labelled "first" to contrast this. Therefore, the numbering is not only necessary to distinguish one player from the other, but also provides information on the role of said player with regard to the offside situation. Upon proper construction, the description as "first player" thus limits the claims to offside detection in football.

6.23 The skilled person understands that the denomination as a "first player" is merely a linguistic technique to denominate a player. The expression "second player" is neither used nor referred to in claim 1, thus not relevant for claim 1, since claim 2 has, by definition, a narrower scope than claim 1. A restrictive dependant claim, which focuses on one specific embodiment, for example by mentioning one way of applying the patented method, does not allow a restrictive interpretation of the main claim. A broad, general term used in the main claim is not to be limited to an understanding corresponding to the more specific or narrower features used in a dependant claim. Instead, the dependant claim merely indicates possible embodiments of the patented invention, which may be linked to additional advantages.

6.24 This rule also applies here. The main claim 1 teaches technology for detecting a contact with the ball by any first player and is not limited to technologies as described in dependent claim 2, which additionally detect a position of a second player at the moment of observation of the observable signal.

6.25 Defendant observes that the title of the patent explicitly refers to detecting an offside situation. However, as the claims do not mention the words "football" or "offside", the title cannot limit the scope of the claims of the

main request. According to R 41(2) EPC the title of the invention shall clearly and concisely state the technical designation of the invention and shall exclude all fancy names.

6.26 Finally, the patent description itself mentions that the method and system of the invention may as well be employed in determining a handball or in determining which player was the last to touch the ball. *See Patent, para. [0022].*

6.27 Defendant states that in view of the description, the term "contact with the ball" in the claim must be understood to refer to "any contact with a player that may lead to offside" (SoD, mn. 19-20 and *Patent, para. [0030]).*

6.28 The Court does not consent to this interpretation. The skilled person understands that a "contact" between ball and player may lead to offside, provided that the contact happens in a football game. The skilled person however does not limit the contact to apply only to the specific offside situation in football. The skilled person understands that a contact leading to an offside situation is an embodiment of contact, which can be measured by applying the patented method, but does not define or restrict the various ways in which a contact between ball and player can happen and be of relevance under the rules of any ball game or sports. The skilled person, who is familiar with the rules of various ball sports and games, will know that there are other instances in which the identification of a contact between ball and player may be necessary under the specific rules of the respective ball game or sport.

6.29 In addition, the method and system of the invention may as well be employed in determining a handball or in determining which player was the last to touch the ball. *See Patent, paras. [0022] and [0054].* For this reason also, feature 1 is not limited to a situation that may lead to offside.

6.30 As explained above, the wording of the patent claim does not exclusively refer to football rules, especially not to offside. The reason why a contact between ball and player needs to be measured in the game or sports is not limited to offside situation in the patent description.

6.31 From that, it follows that the patent claim does not specify how the contact with the ball is to be made. The skilled person understands that the contact as such is determined and that it is immaterial whether the contact is established with a sport accessory, like a racket or bat, or with the foot or with the hand of the first player. The patented method ascertains that there

is contact of any kind between the player and the ball, whereby, as explained above, the ball does not have to be a football.

6.32 ***Feature 1.1:*** *"[the method comprising] sensing a sound signal produced by the ball"*

6.33 The Patent does not explicitly define the meaning of "sound". The sound to be sensed shall be produced by the ball. Generally, any impact on the ball on any surface will yield a sound produced by the ball. The Patent *(para. [0030]*) exemplarily mentions a kick of the ball (a football) including a header or a contact by knee) or the ball hitting the ground as possible causes for a (corresponding) sound produced by the ball. This, however, does not exclude that the sound signal produced by the ball has another origin, for example the hitting of the ball with a racket or a bat.

6.34 **Feature 1.2 "***[the method comprising] processing the sound signal in order to determine whether there is a contact with the ball by the first player*"
According to feature 1.2, the sound signal sensed in feature 1.1 is processed. The purpose of this processing is to determine whether there is a contact with the ball by the first player. The cause for the sound signal needs to be qualified. For this reason, the sensed sound signal is processed in order to determine whether there is a contact with the ball by the first player, i.e. to determine whether the sound signal sensed was caused by a contact of the ball by the first player or whether it was caused by some other event, e.g. the ball hitting the ground [0030].

6.35 ***Feature 1.2.1:*** *"wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player"*

6.36 Feature 1.2.1 defines the processing according to feature 1.2 in more detail. Specifically, the processing must comprise comparing the sensed sound signal with a predetermined signal, which is the signal of a contact with the ball by a player. Feature 1.2.1 does not specify whether the comparison is made automatically, e.g. by a computer, or intellectually, e.g. by the referee.

6.37 ***Feature 1.3*** *[the method comprising] if the processing determines that the ball is contacted by the first player, generating a detection signal*

6.38 As per feature 1.3, a detection signal is generated if the processing of the sensed sound signal according to feature 1.2 (and 1.2.1) determines that the ball made contact with the first player.

6.39 Defendant relies on the description to argue that the claimed detection signal must necessarily be a "temporal indication, i.e. to reflect the moment the ball is contacted by the first player" (SoD, mn. 23-24). Defendant reasons that assisting the detection of offside not only requires the determination of whether the ball has been kicked. Rather, it is essential that the system determines when exactly the ball was kicked. Therefore, according to Defendant, the skilled person understands the claim "if the processing determines that the ball is contacted by the first player, generating a detection signal" as a temporal indication, i.e. to reflect the moment when the ball is contacted by the first player.

6.40 The Court does not follow this argument. The wording of feature 1.3 is clear. There is not a temporal ("*when*"), but a conditional ("*if*") relationship between the detection signal and the determination that the ball has been contacted. The patent description does not mention temporal dictation. It merely discloses means to identify a contact. The skilled person understands that there are several reasons why this contact may be identified. It is either necessary to identify the contact as such or it is necessary, due to the rules of the specific game played, to identify the moment in time in which the contact has occurred. The wording of feature 1.3 covers both options.

6.41 This is confirmed by para. [0022] of the Patent. This section states that the method and system according to the invention may as well be implied in determining a handball and/or which player was the last player to touch the ball before the ball went outside the playfield. This section does not only show that the scope of the patent is not limited to offside detection, but it also shows that the invention does not necessarily aim at identifying a certain moment in which the ball has been touched. Especially for determining a handball it is not the exact time of the touch is what matters, but that the hand of the player has touched the ball at all.

6.42 ***Feature 1.4*** *[the method comprising] supplying the detection signal to a signaling system*

6.43 As per feature 1.4, the detection signal is supplied to a signaling system, with the objective to eventually inform a human of the fact that the ball was

contacted by the first player, as will become clear in the context of feature 1.5.

6.44 ***Feature 1.5*** *[the method comprising] generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal*

6.45 Finally, as per feature 1.5, the signaling system generates an observable signal to be observed by a referee in response to receipt of the detection signal.

Interpretation of features of claim 8

6.46 The features of claim 8 also require interpretation, for which reference can be made to the interpretation of claim 1. Claim 8 is an independent system claim protecting the invention with regard to a combination of steps that realize the method protected by claim 1.

6.47 Claim 8 protects a *system for detecting a contact with a ball by a first player in games and sports (**feature 8).*** As previously discussed with regard to claim 1, the system for detection is not limited to a contact between the ball and the first player in the game of football, but can be applied in any games and sports and for detecting situations not limited to offside. Further, the nature of the contact is not specified. It does not matter whether the ball is hit by a foot or by a sport accessory.

6.48 The system comprises *a sound sensing means (SM), in particular a microphone, for sensing a sound signal produced by the ball (Ba)* (***feature 8.1***).

6.49 According to **feature 8.1.1,** the detection signal generator comprises *a sound processing means (PM) coupled to the sound sensing means for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player* (***feature 8.1.2***). As previously discussed, any impact on the ball on any surface will yield a sound produced by the ball which can be processed afterwards.

6.50 The sound needs to be sensed by a microphone and is then processed in order to qualify the sound. The processing is further defined as comprising means which *serve to compare the sensed sound signal with a predetermined signal* which is the signal of a *contact with the ball by a player (**feature 8.1.2.1**)*.

6.51 Further, according to **feature 8.1.3,** *the detection signal generator generating a detection signal if the sound processing means determines that the ball is contacted by the first player.*

6.52 According to **feature 8.2,** the system comprises *a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system.*

6.53 Finally, pursuant to **feature 8.3,** the system comprises an observable signal generator *in the signaling system for generating, in response to receipt of the detection signal, an observable signal to be observed by a referee.*

7 Lack of Novelty of independent claims 1 and 8 in the Main Request

Legal framework for novelty

7.1 An invention shall be considered new, if it does not form part of the state of the art (Art. 54 EPC). To form part of the state of the art, the subject matter of a claim, with all its features, needs to be directly and unambiguously disclosed in one single piece of prior art and in its existing form, it must be identical in its constitutive elements, in the same form, with the same arrangement and the same features.

7.2 The standard for the disclosure content of a publication is what can and may be expected from the knowledge and understanding of the skilled person.

7.3 Claimant has argued that the Patent lacks novelty under Article 54(3) EPC over documents D1 – D2 because these documents directly and unambiguously disclose the combination of features of claim 1 of the patent at issue in a novelty-destroying manner.

Lack of novelty over D2 (GB 2 403 362 A) ("Roke")

7.4 **Claim 1 in view of D2 (GB 2 403 362 A) ("Roke")**

7.5 The method to which claim 1 pertains is disclosed by UK Patent Application Publication GB 2 403 362 (hereinafter referred to as "*Roke*" or D2). It does not classify as new over "Roke" (Art. 54 EPC).

7.6 The UK Patent Application Publication No. 2 403 362 A ("Roke") was published prior to the filing date of the Patent EP 067 (10 January 2007), namely on 29 December 2004. "Roke" is prior art to be considered for the evaluation of the patentability under Art. 54(2) EPC.

7.7 "Roke" discloses "*an acoustic event synchronisation and characterisation system for sports*" (D2, p. 1, heading). It provides a method for calculating the location of an impact event. More particularly, it discloses means for determining the occurrence and location of an impact event comprising a video-based trajectory tracking system for tracking the path of an object and one or more microphones placed in the expected vicinity of the impact event. It thereby provides help to the referee in deciding when and where an impact between ball and player happened, or whether one occurred at all, and what that impact consisted of in terms of which objects were involved. It helps the referee to classify the event into one of several possible categories. For example, it can be determined whether in fact the ball had touched either the bat or the batsman before respectively hitting the stumps or being caught by a fielder. By describing impact events, "Roke" makes special reference to cricket and other racquet games, such as tennis. It does not mention football but does not exclude other ball sports such as football either.

7.8 As explained above for the interpretation of claim 1, the patent claim is not limited to offside detection in football, such that it is immaterial that D2 relates to racket/bat sports in general and cricket in particular. Therefore, a reader understands that "Roke" discloses "a contact with the ball by first player" which is to be measured in game and sports, in the meaning of feature 1.

7.9 "Roke" discloses a "*Method for detecting a contact with a ball by a first player in games and sports*" (***feature 1).*** The reader of D2 understands that the method applied in "Roke" serves to detect a contact with a ball by a first player in games and sports. As previously explained, the contact with the ball does not necessarily have to be established by a part of the human body, but can also be established by a racket.

7.10 "Roke" discloses a contact. This becomes very clear since, on page 8, line 25 of "Roke", it is stated that "*a valuable further insight may be obtained to determine the nature of the impact, and so to determine, for example, whether the ball hit the bat or part of the batsman*". "Roke" further states that this is "*essential in determining LBW decisions, or whether the impact involved the ball at all*." ("leg before wicket (LBW) decisions").

7.11 As "Roke" describes on page 7, lines 11-14, in cricket, an impact might be between the ball, the cricketer's hat, pad, clothing, the ground or the wicket. In cricket there also is a "contact **with the ball**" by a "first player" (and generally and consecutively by a "second player"), be it using the bat

or, e.g., at the player's leg or the pad covering the leg, respectively (cf. D2, page 7, lines 11-14).

7.12 There is no dispute between the parties with regard to **feature 1.1***: "[the method comprising] sensing a sound signal produced by the ball".* Indeed, "Roke" discloses on page 7, line 15 and 16 that an *"audio signal waveform from an impact is picked up by one or more microphones or other sensors installed near the pitch".*

7.13 Defendant disputes that "Roke" discloses **feature 1.2 "***[the method comprising] processing the sound signal in order to determine whether there is a contact with the ball by the first player*". "Roke" demonstrates that once the audio signal is captured, an analysis can be performed to identify what could have happened at the time of impact. Additionally, "Roke" shows that amongst the various techniques available to analyze the audio waveforms, Wavelet transforms provide an appropriate means of identifying time and frequency varying properties of audio impulses.

7.14 Defendant states that the analysis disclosed in "Roke" is supposedly performed visually by viewers or an umpire using the system's "*display device*", rather than automatically as claimed (SoD, mn. 59-65). Defendant further states that a proper reading of page 21, lines 1-16 of D2 leads to the conclusion that it does not disclose a system wherein it is the system that automatically determines if some ball is contacted by a player.

7.15 Claimant responds that comparing "*a Wavelet transform […] produced for the time region surrounding an impact*" is not meant to be done visually, but automatically.

7.16 First, feature 1.2 is not specified as being made visually nor automatically. Thus, the discussion on whether "Roke" is based on visual or automatic processing is not relevant.

7.17 Second, the parts made available to the viewers or the umpire, as specified on page 21, lines 14-16 of D2, are renditions of the transformed waveforms, which require some processing to be generated.

7.18 Third, assuming that feature 1.2 requires automatic processing, the Court considers Claimant's view to be correct. On page 21 (lines 3-5), "Roke" discloses how the sound signals are to be measured. It states that *"analysis 16 can be performed to identify what could have happened at the time of impact. Amongst the various techniques available to analyse the audio waveforms Wavelet transforms provide an appropriate means of identifying the time and frequency varying properties of audio impulses".*

7.19 Wavelet transform describes a tool for identifying the time and frequency varying properties of audio impulses.

7.20 When applied in sports or games, the Wavelet transforms allow identifying impact sounds as well as analyze their duration and intensity. “Roke” discloses further that these may be examined according to their distinct patterns, allowing them to be classified based on the known characteristics of ball-object interactions, e.g. ball-ground, ball-person (D2, p9 5-7, p 21 6-8).

7.21 While it is true that the analysis of the origin of the sound can be performed visually, as evidenced on page 10, lines 2 and 3, reading that “*This should allow the observer to determine the type of impact: that is, the object that the ball hit.”,* a reader of D2 would understand the following sentence to indicate that there is also an automatic comparison that can be used as an auxiliary tool, since it is stated on page 10, lines 3-5 that: “*This analysis **may also be combined** with an analysis of the sound made by the impact to arrive at a conclusion as to the nature of the object hit by the ball” [emphasis added].* The term “*analysis*” herein provides for an already completed, automatic analysis.

7.22 “Roke” further states, on page 21 lines 14-16, that: “***If required**, renditions of the transformed waveform **can be made** available on a transmitted picture, to allow viewers or an umpire to compare this with the set of patterns representing the various types of impact.”*[emphasis added].

7.23 The assumption that the analysis is conducted automatically becomes especially apparent from the very purpose of the system. The system is designed specifically for time efficient identification of sound patterns, so that it would only be sensible to not burden an umpire with the complex and impractical task of comparing different Wavelet transforms during an ongoing game. Implementation of this comparison by an umpire would, in practice, probably be impossible.

7.24 Moreover, on page 9, lines 5-7, “Roke” states that various possible “*impact events, such as bat-ball, stump-ball, cricketer-ball, ground-ball, bat-pad bat-ground, each have a typical associated sound. This may also be included into a system according to the present invention for assisting in classifying the nature and location of the impact event*.” This analysis aims at identifying the nature and origin of the sound.

7.25 Further, on page 21, lines 7-8, “Roke” discloses that a wavelet transform can be produced and *”this can be compared to a lookup table of wavelet transforms corresponding events of known origin*." Hence, exactly as

required by feature 1.2.1, this processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player.

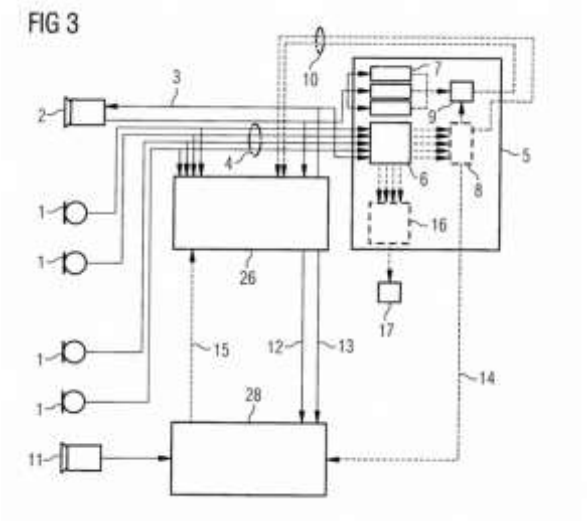
7.26 Defendant further states that the "*analysis 16*" merely concerns one of *"the various techniques available to analyse the audio waveforms", among which the Wavelet transform. It is irrelevant whether or not this analysis is performed automatically, as this analysis does not concern the classification of the captured signal."* Nevertheless, this wording means that a Wavelet transform is used to analyze the audio waveforms and hence to analyze whether the signal is considered to be the sound of a ball which has been hit. Using wavelet transform technology it is the system which exclusively determines what event occurred.

7.27 Further, as Claimant has stated in the oral hearing, a lookup table is not a physical table. A lookup table is a computer storage file, which allows to look up values stored in computer memory and hence is part of the data processing.

7.28 Once the processing determines that the ball is contacted by the first player, the invention according to "Roke" generates a detection signal (***feature 1.3***)**.** Indeed, page 16, line 14 discloses that *"When a signal of an impulsive nature is recorded…, such as is typically generated by an impact event, …".* An impact event yields a signal of an impulsive nature.

7.29 "Roke" also discloses the supply of the detection signal to a signalling system (***feature 1.4).*** Once the sound made by the ball has been detected and analysed, a signal is supplied to a signalling system, such as a display. The described processing "*can be used to give judgement on the nature of the impact, for example on a display device 17*" (D2, p. 21, lines. 10-11).

7.30 This is further illustrated in Fig. 3 of "Roke" which is inserted below.



7.31 Figure 3 illustrates that “Roke” discloses the supply of the detection signal to a signalling system. Figure 3 shows the analysis 16, in which the sound signal is processed and the display device 17. The “*display device 17*” is a unit separate from that responsible for “*analysis 16*”, i.e., that responsible for the processing in the sense of features 1.2 and 1.2.1.

7.32 Analysis 16 and display 17 are connected by an arrow (vertical and downwardly oriented on Fig.3). This arrow indicates that the analysed data is transmitted to the display. If the processing determines that the ball has made contact with the first player (and/or specifically, e.g., his/her bat), it generates a corresponding detection signal that it then supplies to a signalling system such as “*display device 17*”. “*[D]isplay device 17”* then in turn generates an observable signal in response to receipt of the detection signal.

7.33 ***Feature 1.5*** *[the method comprising] generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal*

7.34 As required by **feature 1.5**, the signal displayed on the *“display device 17”* may be observed by a referee (umpire), considering that D2 labels its system as particularly “*useful in the televising and umpiring of sporting events*” (D2, page 7, lines 4-5, emphasis added).

7.35 In summary, this leads to the result that D2 “Roke” is anticipating prior art to claim 1 of the Patent as granted. Claim 1 is invalid due to a lack of novelty.

7.36 **Claim 8 in view of D2 (GB 2 403 362 A) (“Roke”)**

7.37 The system to which claim 8 pertains is also disclosed by “Roke”. Similar to claim 1, it is not to be considered new over “Roke” (Art. 54 EPC). The arguments raised by the court with regard to claim 1 apply similarly to independent claim 8.

7.38 Claim 8 is providing the means to use the method disclosed in claim 1. It discloses a system for detecting a contact with the ball by a first player in games and sports (***feature 8***). “Roke” serves to detect whether a ball is hit by the bat or part of the batsman (page 8, line 25). “Roke” identifies, in cricket, an impact which may be between the ball, the cricketer's hat, pad, clothing, the ground or the wicket (page 7, lines 11-14).

7.39 On page 7, lines 15 and 16, “Roke” also discloses a microphone which picks up the sound signals by stating that an audio signal waveform from an impact is picked up by one or more microphones or other sensors installed

near the pitch. Therefore, it comprises a sound sensing means for sensing a sound signal produced by the ball (***feature 8.1.1***).

7.40 As previously discussed, "Roke" discloses a sound processing means coupled to the sound sensing means for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player (***feature 8.1.2***). According to the disclosure on page 21, the processing serves to identify what could have happened at the time of impact.

7.41 Amongst the various techniques available to analyze audio waveforms, Wavelet transforms provide an appropriate means of identifying the time and frequency varying properties of audio impulses (***feature 8.1.2.1***) to analyze the sound signal in order to determine whether there is a contact with the ball by the first player. On page 9, lines 5-7, "Roke" discloses that various possible impact events have a typical associated sound. On page 21, lines 7-8, "Roke" discloses a comparison to events of known origin.

7.42 As already described in connection to claim 1, "Roke" discloses that once the sound made by the ball has been detected and analysed, a signal is supplied to a signalling system such as a display (***feature 8.2***). According to "Roke", the described processing, as exercised by the system, "*can be used to give judgement on the nature of the impact, for example on a display device 17*" (D2, page 21, lines 10-11). Further, as previously described, the relationship between the processing device 16 and the signal device 17 is shown in Fig. 3.

7.43 Finally, the system comprises a monitor which displays a signal so that the signal is observable (***feature 8.3***)**.**

7.44 In summary, this leads to the result that D2 "Roke" is anticipating prior art to claim 8 of the Patent as granted. Claim 8 is invalid due to a lack of novelty.

8 Lack of Inventive step of independent claims 1 and 8 in the Main Request

8.1 Furthermore the Court considers it useful to examine the inventive step regarding the objects of claims 1 and 8.

Legal framework for inventive step

8.2 According to Article 56 EPC, an invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art.

8.3 Whether inventive step is acknowledged is always to be assessed in each individual case and requires a legal evaluation of all relevant facts and circumstances. As held by the Court of Appeal in *NanoString/10x Genomics* (Order dated 26 February 2024 in UPC_CoA_335/2023, p. 30, fourth para. in the original German language version), the burden of presentation and proof with regard to the facts from which the lack of validity of the patent is derived and other circumstances favourable to the invalidity or revocation lies with the Claimant in a revocation action (Art. 54 and 65(1) UPCA, Rules 44(e)-(g), 25.1(b)-(d) RoP). Even though proof of certain facts, if contested, may thus be required, the ultimate assessment of the relevant facts circumstances is a question of law, which does not lend itself to the taking of evidence.

8.4 Inventive step is to be assessed from the point of view of the skilled person on the basis of the state of the art as a whole including the skilled person´s common general knowledge. The skilled person is assumed to have had access to the entire publicly available art on the relevant date. The decisive factor is whether the claimed subject matter follows from the prior art in such a way that the skilled person would have found it on the basis of their knowledge and skills, for example by obvious modifications of what was already known.

8.5 In order to assess whether or not a claimed invention was obvious to a skilled person, it is first necessary to determine a starting point in the state of the art. There has to be a justification as to why the skilled person would consider a particular part of the state of the art as a realistic starting point. A starting point is realistic if its teaching would have been of interest to a skilled person who, at the priority date of the patent at issue, was seeking to develop a similar product or method to that disclosed in the prior art which thus has a similar underlying problem as the claimed invention (cf. Order dated 26 February 2024 in UPC_CoA_335/2023, *NanoString/10x Genomics*, p. 34 under "cc" in the German original version, "*Für eine Fachperson, die sich zum Prioritätszeitpunkt des Verfügungspatents vor die Aufgabe gestellt sah, […] war D6 von Interesse*"). There can be several realistic starting points. It is not necessary to identify a "*most promising*" starting point.

8.6 Comparing the claimed subject matter, after interpretation following the guidelines provided above under "*claim interpretation*", and the prior art, the subsequent question is whether it would be obvious for the skilled person to, starting from a realistic prior art disclosure, in view of the

underlying problem, arrive at the claimed solution. If it was not obvious to arrive there, the claimed subject matter meets the requirements of Article 56 EPC.

8.7 In general, a claimed solution is obvious if, starting from the prior art, the skilled person would be motivated (i.e. have an incentive or in German: "*Veranlassung*", see Order dated 26 February 2024 in UPC_CoA_335/2023, *NanoString/10x Genomics*, p. 34 of the original German language version) to consider the claimed solution and to implement it as a next step ("*nächster Schritt*", UPC_CoA_335/2023, p. 35, second para.) in developing the prior art. On the other hand, it may be relevant whether the skilled person would have expected any particular difficulties in taking any next step(s). Depending on the facts and circumstances of the case, it may be allowed to combine prior art disclosures.

8.8 A technical effect or advantage achieved by the claimed subject matter compared to the prior art may be an indication for inventive step. A feature that is selected in an arbitrary way out of several possibilities cannot generally contribute to inventive step.

8.9 Hindsight needs to be avoided. The question of inventive step should not be answered by searching retrospectively, with knowledge of the patented subject matter or solution, for any (combination) prior art disclosures from which that solution could be deduced.

Lack of inventive step starting from D3 (BE 10 15 552) ("Penezy")

8.10 The parties agree that D3 is a possible starting point for the assessment of an inventive step.

8.11 The Belgian Patent Application Publication No. 1015552A6 ("Penezy") was published prior to the filing date of the Patent EP 067 (10 January 2007), namely on 7 of June 2005. "Penezy" is prior art to be considered for the evaluation of the patentability under Art. 54(2) EPC.

8.12 D3 discloses an invention which consists in sending information about the moment of the pass instantaneously to the linesman, i.e., when the football player comes into contact with the D.S.J. (Abbreviation of "Detecte.Signale.Juste") ball fitted with the chip, the latter sends the information directly via a sound emitter to the earpiece worn by the linesman, so no more seconds are lost. It proposes placing a chip in a football (and dubs the result "D.S.J. ball"). This chip senses pressure changes and/or shocks experienced by/within the ball due to a contact of a player

with the ball. Linesmen can be instantaneously informed of any such contact via an earpiece in wireless communication with the chip, e.g., such as to better adjudge offside situations (cf. D3, Fig. 4).

8.13 The parties agree that "Penezy" discloses **features 1, 1.1 and 1.4 to 1.5**.(SfR mn 76-77, SoD mn 82-85)

8.14 Claimant states that "Penezy" also discloses **feature 1.2 "***[the method comprising] processing the sound signal in order to determine whether there is a contact with the ball by the first player*".

8.15 Defendant disputes that "Penezy" discloses feature 1.2.

8.16 "Penezy" discloses that: "*any impact or change in pressure in the ball will be signalled by a beep to the linesman's ear*". The chip of D3 is programmed to detect an impact with the player. Thus, some processing takes place within the chip of D3. The information transmitted to the linesman includes whether there was an impact with the ball by the first player (See page 1, lines 14-16 : *"… le choc dû au contacte du joueur avec ballon*". See also claim 1 : … le juge de ligne détectera le choc grâce à la puce électronique.) Also, lines 39-41 of page 1 of D3 show that the signal received from the ball is exploited by the receptor or the emitter of the headset of the linesman. Therefore, some processing of the sound signal is performed in D3 and it allows assessing whether there is a contact with the ball by the player. Feature 1.2 is disclosed in D3.

8.17 Both parties agree that **feature 1.2.1**. is not disclosed in D3.

8.18 Feature 1.2.1 defines the processing as per feature 1.2 in more detail, specifically requiring a comparison of the sensed signal with a predetermined signal that represents a contact with the ball by a player.

8.19 Defendant submits [SoD mn 86] that the problem to be solved when starting from D3 is "*how to provide a more reliable detection of offside situations*". Nevertheless, the Court considers this problem formulation to be too narrow. Defendant is right insofar as the automated determination of the moment of contact indeed makes the determination more objective and therefore more reliable. However, as shown above, the automatic determination of ball contact is not only relevant for offside, but also for other ball games and sports.

8.20 The objective technical problem addressed by feature 1.2.1 may be regarded as to provide a more accurate method for detecting a kick of the

ball, as compared to the method of D3, in particular to distinguish a kick of the ball from a ball bouncing on the ground.

8.21 Claimant states that a solution to this this technical problem is to compare to a reference signal (See SfR, paras. [0087] to [0096])

8.22 The skilled person, looking to improve D3 to provide a more reliable ball contact detection, would have looked in the literature of games and sports how to increase the reliability of the detection, including D2, which belongs to this technical field and teaches a solution to this technical problem. The technical teachings of D2 are understandable by an electrical engineer with a knowledge in contact detection in the field of ball sports.

8.23 D2 emphasizes that determining which objects were involved in an impact is of considerable interest (page 1, lines 9-12) and explains how to do it on top of page 21, by using the lookup table of Wavelet transforms corresponding to events of known origin.

8.24 Claimant states that the idea of comparing a sensed signal to a predetermined signal representing a contact with a ball by a player in order to distinguish such a contact from other events was well known in the prior art at the filing date of the Patent. SfR mn 87: ”*A skilled person had every incentive to apply this knowledge to the system of D3 – because D3 is indeed silent on any details of the processing, inevitably forcing the skilled person to think about how to best implement its teachings.”* SfR mn 89 *“The skilled person would have readily implemented D3’s teachings using D2’s “lookup table of Wavelet transforms corresponding to events of known origin” (…) such as to ensure that impacts experienced by the ball are characterized correctly, in turn enhancing “broadcast, umpiring and training” (cf. D2, p. 1, l. 12)”.*

8.25 Defendant argues that there is no incitation for the skilled person to combine documents D3 and D2.

8.26 However, once the objective technical problem is defined (independently of D2), it is natural for the skilled person to look for a solution in the technical field of games and sports. And D2 provides such a solution, which answers the objective technical problem, so that it is obvious for the skilled person to use this solution within the method and system of D3.

8.27 Concerning the argument of Defendant that D2 does not relate to offside detection, the Court observes that claim 1 of D3 and the objective technical problem relate to this feature. Moreover, as this feature is already known from D3, it is included in any combination starting from D3.

8.28 No long-felt need is demonstrated by Defendant. A long-felt need should be computed between the date of the prior art and the priority date of the patent at issue, not between the date of the prior art and an implementation by a third party. The argument of Defendant cannot be followed.

8.29 Claimant states that "Penezy" also discloses **feature 1.3** *[the method comprising] if the processing determines that the ball is contacted by the first player, generating a detection signal*".

8.30 Defendant disputes that "Penezy" also discloses feature 1.3, based on the fact that feature 1.3. cannot be disclosed if feature 1.2 is not disclosed. However, as mentioned here above, "Penezy" discloses feature 1.2, so that the exclusion invoked by Defendant does not exist.

8.31 Moreover, "Penezy" states in lines 1-3 of claim 1 that the chip in the ball instantaneously sends information related to the shock detected in the ball, which necessarily implies generating a signal to be sent. Feature 1.3 is disclosed in D3.

8.32 Defendant states that D2 and D3 are not compatible because the microphones of D2 are located around the playfield, whereas the chip of D3 is embedded in the ball. However, D2 also contemplates a variant with sensors embedded in the ball. See page 13, lines 25-27.

8.33 Thus, nothing prevents the skilled person from combining D2 and D3, for the reasons given above regarding feature 1.2.1.

8.34 Therefore, the method of claim 1 does not involve an inventive step in view of the combinations of documents D3 and D2.

Claim 8 when starting from (BE 10 15 552) ("Penezy")

8.35 The arguments mentioned above with regard to claim 1 on inventive step apply *mutatis mutandis*. Claimant states that its considerations concerning construction of independent claim 1 apply to independent claim 8. Defendant discusses his interpretation of the features of claim 8 together with those of claim 1.

8.36 As the parties agree that "Penezy" discloses features 1, 1.1 and 1.4 to 1.5.(SfR mn 76-77, SoD mn 82-85), they also agree on the disclosure of the corresponding **features 8, 8.1 and 8.1.1.**

8.37 Claimant states that "Penezy" discloses **feature 8.1.2 "***[the system comprising] a sound processing means (PM) coupled to the sound sensing means for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player;"* Defendant disputes that "Penezy" discloses feature 8.2.

8.38 As explained above, "Penezy" discloses that: "*any impact or change in pressure in the ball will be signaled by a beep to the linesman's ear*". Since the chip of D3 is programmed to detect an impact with the player. Thus, some processing takes place within the chip of D3. The information transmitted to the linesman includes whether there was an impact with the ball by the first player. Thus a sound processing means (PM) is used to determine whether there is a contact with the ball by the (first) player.

8.39 Both parties agree that similar to features 1.2.1. also **feature 8.1.2.1** is not disclosed in D3. As explained above, the skilled person, looking to improve D3 to provide a more reliable ball contact detection, would have looked in the literature of games and sports how to increase the reliability of the detection, including D2, which belongs to this technical field and teaches a solution to this technical problem. D2 provides such a solution, which answers the objective technical problem, so that it is obvious for the skilled person to use this solution within the method and system of D3.

8.40 Claimant states that "Penezy" discloses **feature 8.2 "***[the system comprising] a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system;"* Defendant disputes that "Penezy" discloses feature 8.2.

8.41 As explained above, "Penezy" discloses that: "*any impact or change in pressure in the ball will be signaled by a beep to the linesman's ear*". Since the chip of D3 is programmed to detect an impact with the player. Thus, some information is transmitted from the chip to the earpiece of the linesman. Thus a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator is disclosed.

8.42 **Feature 1.3** corresponds to **feature 8.1.3**. As the Court holds that feature 1.3 is disclosed, the same holds true for feature 8.1.3

8.43 In sum, also claim 8 is obvious over D3 in connection with D2.

9 Dependent Claims 3, 7, 10 and 15

Interpretation of claimant's requests

9.1 Claimant requested "*to revoke the European Patent EP 1 944 067 in the extent of claims 1, 3, 7, 8, 10 and 15 for the territory of the UPC member states Germany and the Netherlands (…)*." This request can be interpreted as requesting the Court to declare invalid the claims listed in this request in this order to the largest extent possible.

Claim 3

9.2 Claim 3 merely states that a detection signal is compiled (created), which includes a content comprising either a sound information or a ball identification code or both.

9.3 Claim 3 of the Patent can be divided into the following features:

> **3.** *Method according to any of the preceding claims,*
> ***3.1*** *wherein generating a detection signal comprises: compiling a content signal of the detection signal,*
> ***3.2*** *the content signal of the detection signal comprising at least one element of the group comprising detected sound information data and a ball identification code."*

9.4 Claimant alleges (SfR mn 100 et seq.) that claim 3 merely requires that the detection signal as per feature 1.3/8.1.3 comprises detected sound information data (which is understood to refer to raw data representing the sound signal as sensed), ball identification code, or both. Claimant considers this as non-inventive. Claimant reasons that "*it is and has always been common practice to supply raw data along with any analysis results relating thereto*" and that "*it is a no-brainer to identify in the detection signal the ball with which contact by a first player was detected*" (§ 100-101 SoC).

9.5 Defendant states that claim 3 is inventive as there is no reason for the skilled person to do this for purposes of improving offside detection (SoD mn. 106).

9.6 A statistical analysis is disclosed in D2. Compiling of a content signal is needed in D2 for implementing features 1.2, 1.2.1 and 1.3. In D2, audio

signals are captured (see top of page 21) and they comprise sound information (sensed by the microphone 20).

9.7 Compiling a signal is needed for using the statistical analysis 16 mentioned on top of page 21 of D2. Thus, feature 3.1 is at least implicitly known from D2.

9.8 Moreover, the chip of D3 must emit a signal to the earpiece and this signal must be compiled from the pressure change or from the shock sensed by the chip, which is programmed to detect pressure changes and shocks due to contact. Thus, feature 3.1 is also known from document D3.

9.9 Therefore, the combination of D3 and D2 considered for claim 1 also induces that feature 3.1 is disclosed.

9.10 Moreover, lines 16-19 of page 1 of D3 show that a pressure change is detected by the chip so that the content signal comprises an information on this pressure change which is equivalent to a detected sound, in the meaning of the first alternative of feature 3.2.

9.11 Further, the signal provided by the chip includes its number, in the form of a bar code, for its own identification. Since the chip is embedded in the ball, this bar code is an identification code of the ball, in the meaning of the second alternative of feature 3.2.

9.12 Thus, the combination of documents D3 and D2 discloses all features of claim 3, without having to consider the other documents provided by Claimant.

Claims 7 and 15

9.13 Claim 7 has the following wording:
Method according to any of the proceeding claims, wherein the contact with the ball by the first player is a kick of the ball.

9.14 Claim 15 has the following wording:
System according to any of claims 8-14, wherein the contact with the ball by the first player is a kick of the ball.

9.15 Since the specific features of claims 7 and 15 are already known from D3, any combination based on this document will include these features. Such is the case for the combination of D3 and D2, which makes the objects on claims 7 and 15 obvious.

9.16 Claimant states that the restriction to football is non-technical and must hence be disregarded for the assessment of the inventive step. Claimant

further states that even if it was considered nonetheless, not least in view of D3, the skilled person would have readily contemplated applying the teachings of D2 also in the context of football, considering that both documents emphasize that they relate to "*ball game[s]*" (D1, p. 1, first para.) and "*ball sports*" (D2, p. 1, heading) more generally (SfR mn 106).

9.17 Defendant responds that the use of the method and system for football is clearly technical. Inter alia, the restriction implies the use of the method using a football (as opposed to another ball), which difference is clearly technical. It also involves the detection of specific contacts – i.e. the types of ball-player contacts in football that may lead to offside. These contacts are also clearly of a technical nature.

9.18 The issue of the technical nature of the invention can be left open because even if these elements of the claim were considered to have a technical nature, there is no inventive step involved over D3 combined with D2.

9.19 Similar to claims 1 and 8, neither claim 7 nor claim 15 are restricted to football. The only additional feature is "*kick of the ball*". This feature "*kick of the ball*" is defined in para. [0009] of the Patent as "*any contact with the ball by a player that may lead or will lead to offside*".

9.20 As previously discussed, D2 ("Roke") will be considered by the skilled person confronted to the technical problem of providing a more accurate method than in D3 for detecting a kick of the ball. D2 discloses a system which "*analyse[s] data from sports matches such as cricket, baseball, tennis and other bat / racquet sports*" to provide information on "[*w]hen and where an impact happened (or whether one occurred at all), and what it consisted of in terms of which objects were involved in the impact*" (D2, p. 1, l. 8-11).

9.21 The skilled person will therefore consider "Roke" and apply the technology disclosed in D2 regarding the identification of a kick of the ball. This does not require an inventive step and directly leads the skilled person toward the method of claim 7, respectively the system of claim 15.

Claim 10

9.22 Claim 10 has the following wording:

System according to any one of the claims 8 - 9, wherein the detection signal transmission system is a wireless transmission system, in particular operating at a frequency that is suitable to transmit over a distance of at least the distance of a diagonal of a play field.

9.23 Claimant states that Claim 10 does not provide any further distinction over D3, in which a detection signal in the sense of feature 1.3/8.1.3 is transmitted wirelessly to an earpiece worn by a linesman. Claimant further states that, for this reason alone, claim 10 cannot provide for an inventive step over D2, either, as the skilled person would have readily contemplated a wireless design for their respective systems in view of D3, but also in view of common general knowledge. In 2007 (when it was filed for the patent-in-suit) wireless technology was already ubiquitous and part of every skilled person's standard repertoire.

9.24 Defendant states that the combination of those documents is not obvious (Claimant provides no arguments for a motivation to combine), whereas D2 does not qualify as suitable starting points / "*closest prior art*" for solving a problem of offside detection in football. Defendant further states that the inventive step was confirmed by the satisfaction of a long felt need. Defendant notes that the problem of offside detection is a long-standing problem. Detection of offside has been historically error-prone, with a great number of match outcome determining errors being made. This argument of long-felt need does not convince the Court for the reasons mentioned regarding the lack of inventive step of the method of claim 1.

9.25 Claim 10 includes

- a first feature "*detection signal transmission system is a wireless transmission system"*
- a second feature: *" in particular operating at a frequency that is suitable to transmit over a distance of at least the distance of a diagonal of a play field".*

9.26 Claimant identifies the second feature as optional (SfR mn 108). Defendant does not discuss whether or not the second feature is optional. In both cases, claim 10 is not inventive.

9.27 First, if the second feature is optional, then claim 10 covers a wireless transmission system between the ball and the signalling system. Such a wireless transmission system is disclosed in D3. See D3 page 1, lines 39-41 : *"… un émetteur qui lui signalerait instantanément par bip l'information émise du ballon…*" and the representation of signal waves in figure 4, next to players 6 and 8. Thus, any combination of prior art based on D3 includes the compulsory feature of claim 10. The object of claim 10 cannot imply an inventive step.

9.28 Second, if one considers that the second feature of claim 10 must be construed in light of the first feature, then the second feature is not optional. Under this assumption, the skilled person understands that the use of a frequency that is suitable to transmit over a distance is necessary because the linesman receiving the signal cannot stand inside the playing field, as this would disturb the game. The skilled person, who has a background in electronic engineering will also understand that in order to fulfill this function, the wireless transmission system must necessarily operate on a suitable frequency.

9.29 In other words, the skilled person has no choice but to use the second feature if he/she needs to implement the invention of D3 in real life. Also for this reason, the object of claim 10 cannot imply an inventive step.

9.30 In addition, D2 teaches on lines 23-24 of page 24 that **wireless** microphones are suitable for insertion into the ball. The skilled person knows that, by definition, wireless microphones work at frequency suitable for transmission up to the corresponding receiver, which confirms to the skilled person that the second feature of claim 10 shall be used when combining the teachings of D2 and D3

9.31 Thus, the Court concludes that the objects of claims 3, 7, 10 and 15 do not imply an inventive step.

10 Defendant's Auxiliary Requests

10.1 Defendant submitted an auxiliary request together with the Defense to revocation on 26 July 2024. Subsequently, together with the Rejoinder on 28 October 2024, Defendant submitted two further auxiliary requests in a Subsequent application to amend the patent. With submission of 28 November 2024 plaintiff opposed the supplementary auxiliary requests.

10.2 The auxiliary requests are as follows, whereby the numbering of the features is according to the submission in the Rejoinder of 28 October 2024. The Court observes that the numbering differs from the numbering which was originally applied in the Statement for revocation and the Reply to the statement of revocation. In addition the features of each request in bold characters are in addition with respect to the claims of the main request.

10.3 Auxiliary request 1 has the following features:

Auxiliary Request 1 – Claim 1

1.1	Method for detecting a contact with a ball by a first player in games and sports, **[1] for detecting an offside situation in a game of football (soccer),** the method comprising:
1.2	sensing a sound signal produced by the ball (Ba), **[2] wherein the ball is a football [3], and wherein the sound signal is sensed by a sound sensing means arranged in the ball;**
1.3	processing the sound signal in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player;
1.4	if the processing determines that the ball is contacted by the first player, generating a detection signal, **[5] wherein the detection signal is generated when the ball is contacted by the first player;**
1.5	supplying the detection signal to a signaling system; and
1.6	generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal.

Auxiliary Request 1 – Claim 8

8.1	System for detecting a contact with a ball by a first player in games and sports, **[1] for detecting an offside situation in a game of football (soccer),** the system comprising:
8.2	a detection signal generator comprising a sound sensing means (SM), in particular a microphone, for sensing a sound signal produced by the ball (Ba), **[2] wherein the ball is a football [3], and wherein the sound sensing means (SM) is arranged in the ball;**
8.3	a sound processing means (PM) coupled to the sound sensing means
8.3.1	for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player
8.4	The detection signal generator generating a detection signal if the sound processing means determines that the ball is contacted by the first player, **[5] wherein the detection signal is generated when the ball is contacted by the first player;**
8.5	a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system;
8.6	an observable signal generator comprised in the signaling system for generating, in response to receipt of the detection signal, an observable signal to be observed by a referee.

10.4 Auxiliary request 2 has the following features:

Auxiliary Request 2 – Claim 1

1.1	Method for detecting a contact with a ball by a first player in games and sports, **[1] for detecting an offside situation in a game of football (soccer),** the method comprising:
1.2	sensing a sound signal produced by the ball (Ba), **[2] wherein the ball is a football, [3] and wherein the sound signal is sensed by a sound sensing means arranged in the ball**;
1.2a	**[4] sensing an acceleration signal produced by the ball (Ba);**
1.3	processing the sound signal in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player;
1.4	if the processing determines that the ball is contacted by the first player, generating a detection signal, **[5] wherein the detection signal is generated when the ball is contacted by the first player**;
1.5	supplying the detection signal to a signaling system; and
1.6	generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal.

Auxiliary Request 2 – Claim 8

8.1	System for detecting a contact with a ball by a first player in games and sports, **[1] for detecting an offside situation in a game of football (soccer)**, the system comprising:
8.2	a detection signal generator comprising a sound sensing means (SM), in particular a microphone, for sensing a sound signal produced by the ball (Ba), **[2] wherein the ball is a football, [3] and wherein the sound sensing means (SM) is arranged in the ball**;
8.2a	**[4] the detection signal generator also comprising an acceleration sensing means for sensing an acceleration signal produced by the ball (Ba);**
8.3	a sound processing means (PM) coupled to the sound sensing means
8.3.1	for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player
8.4	The detection signal generator generating a detection signal if the sound processing means determines that the ball is contacted by the first player, **[5] wherein the detection signal is generated when the ball is contacted by the first player**;
8.5	a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system;
8.6	an observable signal generator comprised in the signaling system for generating, in response to receipt of the detection signal, an observable signal to be observed by a referee.

10.5 Auxiliary request 3 has the following features:

Auxiliary Request 3 – Claim 1

1.1	Method for detecting a contact with a ball by a first player in games and sports, **[1] for detecting an offside situation in a game of football (soccer),** the method comprising:
1.2	sensing a sound signal produced by the ball (Ba), **[2] wherein the ball is a football, [3] and wherein the sound signal is sensed by a sound sensing means arranged in the ball;**
1.2a	**[4] sensing an acceleration signal produced by the ball (Ba); [6] wherein the acceleration signal is sensed by a sensing means arranged in the ball;**
1.3	processing the sound signal in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player;
1.4	if the processing determines that the ball is contacted by the first player, generating a detection signal, **[5] wherein the detection signal is generated when the ball is contacted by the first player**;
1.5	supplying the detection signal to a signaling system; and
1.6	generating by the signaling system an observable signal to be observed by a referee, in response to receipt of the detection signal.

Auxiliary Request 3 – Claim 8

8.1	System for detecting a contact with a ball by a first player in games and sports, **[1] for detecting an offside situation in a game of football (soccer),** the system comprising:
8.2	a detection signal generator comprising a sound sensing means (SM), in particular a microphone, for sensing a sound signal produced by the ball (Ba), **[2] wherein the ball is a football, [3] and wherein the sound sensing means (SM) is arranged in the ball**;
8.2a	**[4] the detection signal generator also comprising an acceleration sensing means for sensing an acceleration signal produced by the ball (Ba); [6] wherein the acceleration sensing means is arranged in the ball;**
8.3	a sound processing means (PM) coupled to the sound sensing means
8.3.1	for processing a sound signal received from the sound sensing means in order to determine whether there is a contact with the ball by the first player, wherein the processing includes comparing the sensed signal with a predetermined signal, which predetermined signal is the signal of a contact with the ball by a player
8.4	The detection signal generator generating a detection signal if the sound processing means determines that the ball is contacted by the first player, **[5] wherein the detection signal is generated when the ball is contacted by the first player;**
8.5	a detection signal transmission system (TM) for supplying the detection signal from the detection signal generator to a signaling system;

8.6	an observable signal generator comprised in the signaling system for generating, in response to receipt of the detection signal, an observable signal to be observed by a referee.

Admission of Auxiliary Requests

10.6 Auxiliary requests 1-3 are allowable. After discussing the admissibility of auxiliary requests 1 and 3 in the interim conference and after giving the parties the opportunity to comment, the judge rapporteur decided by order of 2 March 2025 to admit the subsequent applications to amend (ORD_68879/2024). Reference is made to this order.

Auxiliary Request 1

Features added to claim 1

10.7 **Amendment [1] of feature 1.1 (feature 1 of the main request)**

10.8 Feature 1.1 is modified by adding feature [1] "… for detecting an offside situation in a game of football (soccer)"

10.9 **Amendments [2] and [3] of feature 1.2 (feature 1.1 of the main request)**

10.10 Feature 1.2 is modified by adding

- feature [2] "… wherein the ball is a football" and
- feature [3] "and wherein the sound signal is sensed by a sound sensing means arranged in the ball"

10.11 **Amendment [5] of feature 1.4 (feature 1.3 of the main request)**

10.12 Feature 1.4 is modified by adding feature *[5] "*wherein the detection signal is generated when the ball is contacted by the first player".

Lack of inventive step of the method of claim 1, starting from D3 (BE 10 15 552) ("Penezy")

10.13 **Feature [1]** (*for detecting an offside situation in a game of football (soccer)* and **feature [2]** *("wherein the ball is a football")* are known from D3. The title of D3 mentions '*juste hors jeu*" - offside. Further, figure 4 of D3 is a sketch of an offside position in football. Thus, any combination of prior art based on D3 includes feature [1] and [2].

10.14 **Feature [3]** *("and wherein the sound signal is sensed by a sound sensing means arranged in the ball")* is known from D3. Page 1, lines 27-31 of D3 describe that the chip can be introduced inside the ball; this is also illustrated in figures 1 and 2 of D3. Thus, any combination of prior art based on D3 includes feature [3].

10.15 **Feature [5]** is known from D3. According to page 1, lines 14-16, the changes in pressure which trigger a sound happen at the moment in which the ball is contacted by the player whereby this contact leads to a change of pressure and whereby the shock comes from the contact ('kick') by a player. Thus, any combination of prior art based on D3 includes feature [5].

10.16 Thus, any combination of prior art based on D3 includes features [1], [2], [3] and [5]. The object of claim 1 of the first auxiliary request cannot imply an inventive step.

Features added to claim 8

10.17 **Amendment [1] of feature 8.1 (feature 8 of the main request)**

10.18 Feature 8.1 is modified by adding feature [1] "… for detecting an offside situation in a game of football (soccer)"

10.19 **Amendments [2] and [3] of feature 8.2 (feature 8.1.1 of the main request)**

10.20 Feature 8.2 is modified by adding

- feature [2] "… wherein the ball is a football" and
- feature [3] " and wherein the sound sensing means (SM) is arranged in the ball"

10.21 **Amendment [5] of feature 8.4 (feature 8.1.3 of the main request)**

10.22 Feature 8.3 is modified by adding feature *[5] "*wherein the detection signal is generated when the ball is contacted by the first player".

Lack of inventive step of the system of claim 8, starting from D3 (BE 10 15 552) ("Penezy")

10.23 The features added to claim 8 in auxiliary request 1 are nearly identical to the features added to claim 1 in auxiliary request 1. Therefore, the considerations above, which related to claim 1 on inventive step apply *mutatis mutandis* to claim 8 of auxiliary request 1. D3 discloses an offside situation in a game of football (**feature [1]**) and also shows that the sound

sensing means are arranged in the football (**features [2] and [3]**). As previously claimed, D3 also discloses **feature [5]** according to which the detection signal is generated when the ball is contacted by the first player.

10.24 In sum, also auxiliary request 1 regarding claim 8 does not imply an inventive step.

Auxiliary Request 2

Features added to claim 1

10.25 **Amendments [1], [2], [3] and [5] of claim 1 of Auxiliary Request 1 are reproduced in claim 1 of Auxiliary Request 2**

10.26 **Further Amendment [4] of feature 1.2a**

10.27 Feature 1.2a is added with feature [4] "…*sensing an acceleration signal produced by the ball (Ba)"*

Features added to claim 8

10.28 **Amendments [1], [2], [3] and [5] of claim 8 of Auxiliary Request 1 are reproduced in claim 8 of Auxiliary Request 2**

10.29 **Further Amendment [4] of feature 8.2a**

10.30 Feature 8.2a is added with feature [4] *"the detection signal generator also comprising an acceleration sensing means for sensing an acceleration signal produced by the ball (Ba))"*

Inadmissible extension of Auxiliary Request 2

10.31 An amendment is regarded as introducing subject-matter which extends beyond the content of the application as filed, and therefore unallowable, if the overall change in the content of the application (whether by way of addition, alteration or excision) results in the skilled person being presented with information which is not directly and unambiguously derivable from that previously presented by the application, even when account is taken of matter which is implicit to a person skilled in the art. Any amendment can only be made within the limits of what a skilled person would directly and unambiguously derive, using common general knowledge, and seen

objectively and relative to the date of filing (or the priority date, where appropriate), from the whole of the documents as filed (LD The Hague, Order dated 19 June 2024 in UPC_CFI_131/2024, *Abbott Diabetes Care/Sibio Technology*, page 12, mn 3.4; CD Paris, Decision dated 17 January 2025 in UPC_CFI_316 /2023, *NJOY Netherlands B.V./Juul Labs International, Inc.,* p. 22 mn 9.2).

10.32 The Patent cannot be upheld in the form of Auxiliary Request 2 if Auxiliary Request 2 extends beyond the content of the European application as filed (Exhibit BP9).

10.33 With regard to auxiliary request 2 (originally submitted as the only auxiliary request in submission of 26 July 2024), in its submission of 27 September 2024 Claimant alleges extension of subject matter.

10.34 The precise wording used for Auxiliary Request 2 claim 1 and 8 in its flow of words can as such not be found in the application.

10.35 Independent claim 1 according to the Auxiliary Request 2 leaves open where and/or by what means *"an acceleration signal produced by the ball*" as per feature [4] is sensed.

10.36 Similarly, independent claim 8 according to the Auxiliary Request 2 does not specify where the detection signal generator and/or the acceleration sensing means is located.

10.37 Hence, the independent claims 1 and 8 as per Auxiliary Request 2 cover embodiments in which a sound signal produced by the ball "*is sensed by a sound sensing means arranged in the ball*" as per feature [3], whereas "an acceleration signal produced by the ball" as per feature [4] may be sensed anywhere, i.e., also outside of the ball.

10.38 In contrast, the original disclosure requires that **both** the sound signal and the acceleration signal are sensed inside the ball. The original application documents only discloses an embodiment where both a sound signal as well as an acceleration signal are sensed by a "sensing means" within a ball.

10.39 Auxiliary request 2 claims 1 and 8 of the Patent hence extend beyond the content of the European application as filed and thus violate Art. 123(2) EPC. The Patent cannot be maintained in form of Auxiliary Request 2 claim 1 and/or 8.

Auxiliary Request 3

Features added to claim 1

10.40 **Amendments [1], [2], [3], [4] and [5] of claim 1 of Auxiliary Request 2 are reproduced in claim 1 of Auxiliary Request 3**

10.41 **Further Amendment [6] of feature 1.2a of the second auxiliary request**

10.42 Feature 1.2a is further modified by adding [6] "*wherein the acceleration signal is sensed by a sensing means arranged in the ball*".

Lack of inventive step of the method of claim 1 starting from D3 (BE 10 15 552) ("Penezy")

10.43 Features [4] and [6] are known from D3 page 1, line 15 (…*puce programmée pour détecter (…) le choc dû au contacte du joueur… »*). This part of D3 discloses that the chip inserted into the football, as per feature [6], is programmed to detect the shock stemming from the contact of the player, as per feature [5]. Thus, any combination of prior art based on D3 includes features [5] and [6].

10.44 Thus, any combination of prior art based on D3 includes features [1] to [6]. The object of claim 1 of the third auxiliary request cannot imply an inventive step.

10.45 In addition the use of an accelerometer is also disclosed in D2 : page 7, line 7, and page 10, line 12.

Features added to claim 8

10.46 **Amendments [1], [2], [3], [4] and [5] of claim 1 of Auxiliary Request 2 are reproduced in claim 1 of Auxiliary Request 3**

10.47 **Further Amendment [6] of feature 8.2a of the second auxiliary request:**

10.48 Feature 8.2a is further modified by adding [6] "*wherein the acceleration sensing means is arranged in the ball*".

Lack of inventive step of the system of claim 8, starting from D3 (BE 10 15 552) ("Penezy")

10.49 The features added to claim 1 in auxiliary request 3 are nearly identical to the features added to claim 1 in auxiliary request 1. Therefore the considerations above, which related to claim 1 on inventive step apply *mutatis mutandis* to claim 8 of auxiliary request 1. D3 discloses an offside situation in a game of football (**feature [1]**) also shows that the sound sensing means are arranged the football (**features [2] and [3]**). As previously claimed, D3 also discloses **feature [5]** according to which the detection signal is generated when the ball is contacted by the first player. Moreover, D3 discloses that an acceleration due to a shock with a player is sensed by the chip embedded in the ball, as per **features [4] and [6]**.

10.50 In sum, also auxiliary request 3 regarding claim 8 does not imply an inventive step.

11 Costs

11.1 In accordance with Article 69 UPCA and since the Patent is revoked entirely, the Defendant, as the unsuccessful party, has to bear the legal costs of the Claimant.

12 Value of dispute

12.1 The assessment of the value of the dispute shall reflect the objective interest pursued by the filing party at the time of filing the action. The Guidelines for the determination of the court fees and the ceiling of recoverable costs laid down in a decision of the Administrative Committee for this purpose (hereinafter: "Guidelines") may in particular be taken into account. For proceedings where a fixed fee and a value-based fee are to be paid as court fee (actions identified in R. 370(2) and (5) RoP), this is stipulated in R370 (6) RoP. According to R152 (3) RoP R. 370(6) RoP is to be applied likewise to proceeding with only a fixed fee (e.g. proceedings of R. 370(4) RoP).

12.2 To indicate the value in dispute in a singular revocation action, it is sufficient to indicate in which band of the 10 bands indicated in annex of the document "Scale of ceilings for recoverable costs" authored by the Administrative Committee the value in dispute is considered to be.

12.3 In a revocation action, the court fee is a fixed fee (R370 (4) (a) 'RoP') and the value in dispute is only needed to determine the ceiling for recoverable costs.

12.4 The parties did not provide sufficient information that would allow the calulation of a reasonable license fee as basis for determining the value of the dispute (Sec. II.2.b)(2)(i) of the Guidelines. The Court uses as starting point the value of the dispute as set out by the Hamburg Local Division which sets the value to EUR 500,000.

12.5 According to Sec. II.2.b)(2)(ii) of the Guidelines, in the absence of relevant information the value of the revocation counterclaim may be assumed as being equal to the value of the infringement action plus up to 50%.

12.6 Claimant has not raised a revocation counterclaim but has lodged a revocation action. However the general principle of the Guidelines is applicable according to which, in the absence of relevant information, the value of dispute of a revocation action is considerably higher than the value of an infringement action to which the revocation action is linked and in which the same patent is at issue.

12.7 The Court further takes into account that the proceedings before the Hamburg Local Division only concerned preliminary measures. According to Sec 5 (b) of the Guidelines, in case of the application for interim relief which is not followed by an infringement action on the merits the value of an application for interim relief for determining the level of the recoverable costs should be calculated at 66% of the value of a lawsuit. From this the Court derives the general principle that the value of the dispute in main proceedings will be 1/3 higher than in interim relief proceedings.

12.8 On the other hand the Court takes into account that the current revocation action has been initiated by one party only, whereas the proceedings before the Hamburg Local Division only concerned preliminary measures were directed against three defendants. This allows for a certain deduction.

12.9 Considering these factors in their entirety, the Court concludes that the bar of EUR 500,000 is surpassed but the value of the dispute has not doubled. Therefor the value of dispute is in the range between EUR 500,000 and up to and including EUR 1,000,000.

13 Ceiling for recoverable costs

13.1 The Administrative Committee has published a Scale of ceilings for recoverable costs depending on the value of the dispute. This Scale of ceilings will be applied by the Court.

13.2 The Court decides that the value of the proceedings is up to and including EUR 1,000,000 so that, according to the Scale of ceilings the ceiling for recoverable costs in this case is EUR 112,000.

13.3

14 Reimbursement of security

14.1 The EUR 25,000 paid by Defendant as security shall be kept by the Court until Defendant provides proof of payment of the reasonable litigation costs to Claimant.

DECISION

Having heard the parties on all relevant aspects of the case, the Central Division:

1. revokes European patent n° EP 1 994 067 B1 with effect for Germany and the Netherlands.
2. orders that the Registry shall send a copy of this decision to the European Patent Office and to the national patent office of any Contracting Member States concerned, after the deadline for appeal has passed.
3. dismisses any further request made.
4. orders that the defendant bears the costs of the proceeding.
5. sets the value of the proceedings up to and including EUR 1,000,000.
6. orders that the EUR 25,000 paid by Defendant as security shall be kept by the Court until Defendant provides proof of payment of the reasonable litigation costs to Claimant.

NAMES AND SIGNATURES	
Judges François Thomas, Presiding judge (on leave): For François Thomas, Presiding judge, on his stead Maximilian Wilhelm Haedicke Digital signiert von Maximilian Wilhelm Haedicke DN: cn=Maximilian Wilhelm Haedicke, c=DE Datum: 2025.04.30 12:43:33 +02'00' Maximilian Haedicke, Legally qualified judge and judge-rapporteur: Maximilian Wilhelm Haedicke Digital signiert von Maximilian Wilhelm Haedicke DN: cn=Maximilian Wilhelm Haedicke, c=DE Datum: 2025.04.30 12:45:19 +02'00'	**For the Deputy-Registrar** Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet Signature numérique de MARGAUX MARIE-ANGE GRONDEIN Date : 2025.04.30 13:39:51 +02'00'

Gérard Myon, Technically qualified judge:	Gérard, Jean -Pierre Myon Signé numériquement par Gérard, Jean-Pierre Myon DN : cn=Gérard, Jean-Pierre Myon, c=FR Date : 2025.04.29 21:56:46 +02'00'

Information about appeal
An appeal against the present Decision may be lodged at the Court of Appeal, by any party which has been unsuccessful, in whole or in part, in its submissions, within two months of the date of its notification (Art. 73(1) UPCA, Rule 220.1(a), 224.1(a) RoP).

Information about enforcement
Art. 82 UPCA, Art. 37(2) UPCA, Rule 118.8, 158.2, 354, 355.4 RoP.
An authentic copy of the enforceable decision will be issued by the Deputy-Registrar upon request of the enforcing party, Rule 69 RegR.

Order details

Order no. ORD_69092/2024 in ACTION NUMBER: ACT_27358/2024
UPC number: UPC_CFI_230/2024
Action type: Revocation Action