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**Datasheet for the decision  
of 23 June 2021**

**Case Number:** T 1598/18 - 3.5.06

**Application Number:** 05857436.9

**Publication Number:** 1789908

**IPC:** G06K9/00

**Language of the proceedings:** EN

**Title of invention:**

MULTISPECTRAL IMAGING BIOMETRICS

**Patent Proprietor:**

HID Global Corporation

**Opponent:**

Idemia Identity & Security France

**Headword:**

Multispectral skin imaging / HID 3

**Relevant legal provisions:**

EPC Art. 123(2), 123(3), 84

RPBA 2020 Art. 13(2)

**Keyword:**

Amendments - added subject-matter (no)

Amendment after summons - exceptional circumstances (yes)

**Decisions cited:**

T 1294/16

**Catchword:**

A new definition or the re-defining of a known term does not add subject matter, if there is pertinent disclosure in the application as a whole (point 18).



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Case Number: T 1598/18 - 3.5.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.06**  
**of 23 June 2021**

**Appellant:**  
(Patent Proprietor)

HID Global Corporation  
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**Representative:**

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**Respondent:**  
(Opponent)

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**Representative:**

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**Decision under appeal:**

**Decision of the Opposition Division of the  
European Patent Office posted on 24 April 2018  
revoking European patent No. 1789908 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

**Chairman** B. Müller  
**Members:** T. Alecu  
A. Teale

## Summary of Facts and Submissions

- I. The appeal is against the decision of the Opposition Division to revoke European patent number EP 1789908 B1 (the patent in suit). The notice of opposition raised all grounds of opposition (Article 100(a), (b) and (c) EPC). The decision found the patent as granted (main request) to extend beyond the subject matter of the application as filed (Article 100(c) EPC), and found all other requests to suffer from the same deficiency (under Article 123(2) EPC).
  
- II. The appellant (patent proprietor) initially requested "to withdraw the decision revoking the ... European patent, to determine the opposed patent as granted as complying with Article 123(2) EPC and to remit the case to the Opposition Division (OD) for further prosecution", in the alternative for further prosecution on the basis of one of seven auxiliary requests. Auxiliary requests numbered 1, 2, 3, 4, 5.1 and 5.2 were the same as before the first instance. Auxiliary request 1.2 was filed during appeal proceedings, after the reply by the respondent, to be inserted between auxiliary requests 1 and 2.
  
- III. The respondent requested to "reject the appeal" and "revoke the patent". They argued *inter alia* that the patent in suit and all auxiliary requests added matter extending beyond the content of the original application.
  
- IV. The Board summoned the parties to oral proceedings. In the communication accompanying the summons it informed the parties of its provisional opinion that the patent as granted extended beyond the subject matter of the

application as filed and that that was also the case for the other requests on file, except requests 3, 4 and 5.2.

V. The respondent indicated that they would not take part in the oral proceedings and argued that all requests were in breach of Article 123(2) EPC. Remittal was requested should the Board find that the subject-matter of one of the requests did not extend beyond the content of the application as filed.

VI. During the oral proceedings, the appellant withdrew all requests but the third auxiliary request, which was modified by amending the description (see below).

VII. The requests of the parties are therefore as follows:

The appellant (patent proprietor) requested that the decision under appeal be set aside and the case be remitted to the department of first instance for further prosecution on the basis of the claims according to the third auxiliary request and the description and drawings of the patent as granted with the modification of paragraph 57 on page 7 of the description as filed on 12 February 2016.

The respondent (opponent) requested that the appeal be dismissed. Should the Board consider that the subject-matter of one of the requests does not extend beyond the content of the application as filed, it was requested that the case be remitted to the department of first instance, as the other grounds for opposition had not yet been discussed in opposition proceedings.

VIII. Claim 1 of the third auxiliary (and sole) request is quoted below in the reasons.

## Reasons for the Decision

### *The patent in suit*

1. The patent in suit relates to multispectral imaging biometrics. A purported skin site (e.g. a fingertip) is irradiated with light under different optical conditions and a multispectral image is derived therefrom (paragraph 8).
  - 1.1 The different conditions may concern differences in polarization, illumination angles or wavelengths (paragraphs 27, 57).
  - 1.2 The multispectral image can be used (pars. 104-114) to perform biometric functions, such as biometric authentication/identification, or spoof detection. The imaging device can also be used for other purposes, for instance as an input device for a computer (e.g. button or touch-pad - see pars. 115-126).

### *The claims: added subject-matter*

2. Claim 1 of the sole request reads (without reference symbols; amendments are indicated with respect to claim 1 as filed, insertions underlined and deletions struck through):

*A method of performing a biometric measurement on an individual, the method comprising:*

*illuminating a purported skin site of the individual under a plurality of distinct optical conditions during a single illumination session, wherein the plurality of distinct optical conditions comprises singularly or in combination at least two distinct polarization conditions and at least two different illumination wavelengths [first amendment];*

*receiving light scattered beneath a surface of the purported skin site separately for each of the plurality of distinct optical conditions;*

*deriving a multispectral image, which consists of a set of images collected from the light scattered from beneath the skin site for each of the plurality of distinct optical conditions [second amendment], of the purported skin site from the received light; and*

*identifying the individual ~~performing a biometric function~~ [third amendment] with the derived multispectral image.*

3. The Opposition Division concluded that the first amendment did not extend beyond the subject matter of the application as originally filed, Article 123(2) EPC (decision point 35), that the second did (points 36 to 42), and did not decide on the third. The respondent argued that all three amendments constituted added matter.

#### *The optical conditions*

4. Both the proprietor and the Opposition Division (see point 23 of the impugned decision) interpreted the first amendment as an *and/or* condition, i.e. at least two polarization conditions *and/or* two conditions other than polarization.
5. The Board is not convinced by this interpretation, and is of the opinion that the term *singularly or in combination* refers to whether the conditions are applied singularly (e.g. crossed polarization only) or in combination with another (e.g. red light and crossed polarization), and that the claim in fact requires that all at least four conditions (i.e. two polarization and

two wavelength conditions) be used to define the optical conditions for the illumination session.

6. The question to be asked is therefore whether the skilled person would have clearly and unambiguously derived the combination of (at least) those four conditions to set up an illumination session.
7. The Opposition Division seems to have been of the opinion (see points 24-25) that the original application provided a basis for a combination of at least two polarization conditions with two other distinct conditions, when these other two are from the set of illumination/imaging angles and wavelengths (see the decision at points 24, 25 and 35, citing paragraph 60 of the application as filed).
8. The Board agrees. Paragraph 60 states "*The different optical conditions may include differences in polarization conditions, differences in illumination angle, differences in imaging angle and differences in illumination wavelength*".
  - 8.1 Although not explicitly indicated, a combination of the quoted types of conditions is immediately apparent to the skilled person because "*differences in...*" implies at least two different conditions, and because a combination of any of the two quoted types of conditions is clearly indicated in this passage, and derivable by the skilled person, who understands that all combinations are envisaged.
  - 8.2 The board points out that this is not a situation where a large number of possible combinations results in it not being clear which ones can be considered as clearly identified. Here the combinations are few and easily identifiable.



9. The respondent disagreed with this assessment because the application as filed did not explicitly mention this particular combination of four conditions. The Board points out that Article 123(2) EPC, as interpreted by the case law of the Boards of Appeal, does not require an explicit disclosure, but merely that the subject-matter be directly and unambiguously derivable from the original application.
10. The respondent further disagreed (in the last letter), because the application as filed did not disclose more than two polarization conditions, allegedly because a maximum of two polarizers are used. This, however, does not limit the number of polarization conditions. One can rotate either of the two polarizers, or indeed use only one, or none, to obtain various polarization conditions differing in polarization angle.
11. Thus the first amendment is not in breach of Article 123(2) EPC.

*The multispectral image for identifying an individual (second and third amendments)*

12. The dispute regarding the second amended feature revolves around the question of whether a multispectral image is something other than the multispectral data (see the impugned decision at points 37 to 40). This is because, in the understanding of the appellant, the terms *multispectral data* and *multispectral image* are used equivalently throughout the application as filed. Given that the multispectral data is defined as the set of images acquired during an illumination session, if this equivalence of the two concepts were established, there would be no added subject-matter.

13. The respondent disputes this equivalence, stating that the application uses the term *multispectral image* differently from *multispectral data*, and that the definition provided in the claim is new. As neither the original claims, nor the original description, provides such a definition, this extends the subject matter beyond that of the original application. Furthermore, the original application (paragraph 60), required all acquired images to be used because the *multispectral data* was defined in that way. Defining the *multispectral image* as "a set of images" meant that not all images were required, thereby also adding subject matter.
  
14. The Board agrees that the term *multispectral data* is to be understood as the set of all images acquired in one session. Paragraph 60 as originally filed states that: "*The set of all images collected under a plurality of distinct optical conditions during a single illumination session is referred to herein as "multispectral data".*"
  
15. It remains to be seen what the skilled person would understand a "*multispectral image*" to be.
  - 15.1 In the Board's opinion, by way of their common general knowledge only, the skilled person would understand a multispectral image to be an image with multiple layers (or planes), each layer being itself an image taken at a particular wavelength - (see the reply of the respondent to the grounds of appeal at page 6).
  - 15.2 Reading the application as originally filed, the skilled person finds no definition of a multispectral image. The multispectral image is always "derived" from the received light (paragraphs 16, 22, 33; claim 1). The usage of the term is otherwise consistent with the

standard definition, i.e. the above understanding by the skilled person (see figures 9, 11, 12, 13).

15.3 It is therefore reasonable to assume that, on the basis of the original application, the skilled person would understand that the multispectral image conforms to the standard definition, and that it is derived from the multispectral data output by the multispectral sensor.

16. The current request sets out in claim 1 a new definition of the multispectral image, which is that it "*consists of a set of images collected from the light scattered from beneath the skin site for each of the plurality of distinct optical conditions*". This definition is new, and it amounts to redefining *multispectral image* as something *consisting of the multispectral data*. This was accepted by the appellant during the oral proceedings.

17. As noted above, the respondent disagreed that the claim defines that the multispectral image consists of *all* images collected in one illumination session. The Board is of the opinion that, while the definition uses the formulation "*a set of images*", these images are collected for *each* of the plurality of conditions. It follows that the claimed *multispectral image* contains images for each condition, and thus cannot be technically distinguished from the *multispectral data* as defined in paragraph 60. The Board concludes therefore that claim 1 effectively defines the *multispectral image* as consisting of the *multispectral data*, i.e. the terms are, as defined in the claim, equivalent.

18. As already stated, this definition is new to the skilled person. The fact that the definition is new does not however automatically mean that there is an

extension of subject-matter, because the definition is not given in a vacuum, but in a context provided by the claim as a whole. There would be added subject-matter only if there were no disclosure in the original application of using the claimed data set, i.e. the multispectral image/data, for identifying an individual, which is what the claim, as a whole, says, when considering the second and third amendments together.

19. The respondent is of the opinion that this is the case in that original claim 1 required the *derivation* of a (standard) *multispectral image* in order to perform the biometric function / identification.
20. The appellant points to figure 6, paragraph 102 and 117, to show that it is clear that the acquired set of images, i.e. the multispectral image as defined, is used for identification.
21. Paragraph 102 states that: "*The collected data are then used to perform a biometric function, such as an identification*". Since the claim says nothing more than that (see above), the Board concludes that there is no extension of subject matter in the sense of Article 123(2) EPC. Current claim 1 has a basis in paragraphs 60 (definition of optical conditions and of the multispectral image/data) and 102 (use for identification) of the original application.

*The description*

22. The appellant requested during the oral proceedings to amend paragraph 57 of the description by removing the second sentence, specifying that "*the multispectral*

*image is generated from the multispectral data, which are the set of all images ...".*

23. This passage had been added during examination. It may be read to mean that the multispectral image does not consist of all images (being only generated from them), contrary to the adopted claim construction. Its removal is therefore an appropriate response to the objection of added matter raised by the respondent, concerning the fact that all acquired images must be used. It may also be seen as an amendment pre-empting a lack of clarity objection in respect of claim 1 (Article 84 EPC - description not in accordance with the claim).
24. The respondent had addressed this passage of the description, and objected to its removal (previous first auxiliary request), on the grounds that it stated that all images are used, and removing it would extend the scope of protection (Article 123(3) EPC) in view of Article 69 EPC, because the claim did not require that. As is clear from the above, the Board neither agrees with the interpretation of this passage (as already communicated in the summons at point 21.1), nor with this claim construction. This objection is therefore moot.
25. The admittance of this request to amend paragraph 57 of the description is *a priori* regulated by Article 13(2) RPBA 2020.
- 25.1 Though no factually exceptional circumstances justify this late request, in that the objection was on file from the beginning of the appeal stage, the Board is of the opinion that the legal situation is exceptional (see T 1294/16 point 18). This is because the admittance of this request is not detrimental to

procedural economy and does not adversely affect other parties (see *ibid.* point 19) as it:

- (a) improves legal certainty, by clarifying the claimed matter,
- (b) is actually in the interest of the opponent and of third parties, because it may limit the claimed scope, following the principle that a document has to be interpreted as a whole (cf. Case Law, 9th ed. 2019, II.A.6.3.2.), and
- (c) it causes no undue delays, because all the arguments were already discussed, which means that the Board can immediately decide as to its allowability.

26. The Board therefore admitted this request for amendment, which it considers compliant with the provisions of Articles 84, 123(2) and 123(3) EPC.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution on the basis of the claims according to the third auxiliary request and the description and drawings of the patent as granted with the modification of paragraph 57 on page 7 of the description as filed on 12 February 2016.

The Registrar:

The Chairman:



L. Stridde

B. Müller

Decision electronically authenticated