

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 15 March 2023**

Case Number: T 1580/20 - 3.4.02

Application Number: 12722877.3

Publication Number: 2707868

IPC: G09G5/00, G09G5/02

Language of the proceedings: EN

Title of invention:

HIGH DYNAMIC RANGE IMAGE SIGNAL GENERATION AND PROCESSING

Applicant:

Koninklijke Philips N.V.

Headword:

Relevant legal provisions:

EPC Art. 54(1), 54(3), 84, 111(1), 123(2)
RPBA 2020 Art. 11

Keyword:

Remittal to the department of first instance - (yes)

Decisions cited:

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1580/20 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 15 March 2023

Appellant: Koninklijke Philips N.V.
(Applicant) High Tech Campus 52
5656 AG Eindhoven (NL)

Representative: Philips Intellectual Property & Standards
High Tech Campus 52
5656 AG Eindhoven (NL)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 25 February
2020 refusing European patent application No.
12722877.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman R. Bekkering
Members: A. Hornung
T. Karamanli

Summary of Facts and Submissions

I. The applicant appealed against the decision of the examining division refusing European patent application No. 12722877.3 on the basis of Article 97(2) EPC because the requirements of Articles 84 and 123(2) EPC (main request, second and third auxiliary requests) and Articles 54(1) and 54(3) EPC (main request) were not fulfilled. The first auxiliary request was not admitted into the proceedings under Rules 116(2) and 137(3) EPC.

II. The applicant requested that the decision under appeal be set aside and a patent be granted on the basis of the claims in accordance with a main request or one of the first to fourth auxiliary requests, all requests filed with the statement setting out the grounds of appeal.

III. The present communication refers to the following document dealt with in the proceedings before the examining division:

D6: WO 2011/107905 A1.

IV. Independent claim 1 in accordance with the main request reads as follows (the features of claim 1 of the main request will be referred to as **F1** to **F5**):

F1 "An apparatus for generating an image signal in which pixels are encoded in N-bit words, encoding at least a luma per pixel, the apparatus comprising:

F2 a receiver (201) for obtaining high dynamic range pixel values in accordance with a first color representation in M-bit words;

F3 a first generator (203) for including the high dynamic range pixel values in the image signal in the N-bit words according to a second color representation; and

F4 a second generator (205) for including in the image signal an indicator of a HDR encoding by which high dynamic range pixel values are encoded,

F5 which indicator is a luminance at which the maximum luma code is intended to be rendered".

Reasons for the Decision

1. Main request - clarity (Article 84 EPC)
 - 1.1 According to the examining division, feature **F3** of claim 1 was unclear, because it "conveys the impression that the received M bit high dynamic range pixel values are added/intermingled (verbatim: included) into the previously-claimed generated (i.e. already existing) image signal which comprises the pixels (pixel values?) encoded in N-bit word" (appealed decision, point 10.1).
 - 1.2 The board is not convinced by the examining division's objection.

Although the phrase "for including" in feature **F3** requires some interpretation, the skilled person would understand that the M-bit high dynamic range pixel values received by the receiver (feature **F2**) are used by the first generator

to form the N-bit words (feature **F3**) of the image signal generated by the apparatus (feature **F1**). It is sufficiently clear from the wording of claim 1 that the "image signal in which pixels are encoded in N-bit words" is not, as suggested in the appealed decision, "already existing" at the time when M-bit pixel values are included in the N-bit pixel values.

Moreover, although the wording of claim 1 has a broader scope of protection than each of the two individual embodiments referred to by the examining division in point 10.1, last paragraph, of the appealed decision, the board considers that the combination of the two embodiments where $M=N$ and $M>N$ provides sufficient support for the scenario defined in claim 1.

2. Main request - amendments (Article 123(2) EPC)

2.1 The board is not convinced by the examining division's assertion that omitting the reference display in feature **F5** represented an unallowable intermediate generalisation (appealed decision, point 11).

2.2 As submitted by the applicant, the patent application as originally filed, page 6, lines 15 to 27, teaches a concrete relationship between a luminance and a luma code: "the luminance corresponding to the pixel value [i.e. the luma code] representing the highest luminance of the second color representation may be indicated by the indicator" (page 6, lines 25 to 27). The existence per se of such a relationship between a luminance and a luma code is not dependent on whether the display is a reference display or the actual display.

3. Main request - novelty (Article 54(1) EPC)

3.1 According to the appealed decision (see point 12 of the Reasons of the decision), the subject-matter of claim 1 lacks novelty in view of document D6 which is deemed to be prior art under Article 54(3) EPC. In particular, the examining division referred to D6, page 12, lines 3 to 10; page 21, line 28 to page 22, line 10; page 23, lines 13 to 16; page 23, lines 21 to 23, for showing that features **F4** and **F5** were disclosed in D6.

3.2 The board is not persuaded by the examining division's reasoning because document D6 does, at least, not disclose feature **F5**.

Feature **F5** defines a concrete relationship between a luminance and a luma code. The luminance is the brightness, expressed in nits or candela/m². The luma code is the numerical value representing the brightness. For example, "the brightest code (e.g. 1023 for a 10 bit representation) is intended to correspond to a luminance of, say, 50 000 nits" (page 19, lines 8 to 10).

None of the passages of D6 cited by the examining division recites a relationship between a luminance and a luma code as defined in claim 1. The cited passages of D6 disclose a maximum luminance of at least a portion of the displayed image. However, the disclosure of this maximum luminance in D6 merely means that no pixel of the displayed image may be brighter than the maximum luminance. Document D6 does not disclose the provision of an indicator linking the maximum luminance to a luma code. One does not know whether the maximum luminance in D6 is associated with a luma code which is the highest possible numerical value obtainable by the N-bit words or whether it is associated with a lower luma code. Even though it may be argued that it is likely that the skilled person would associate the maximum luminance with the maximum luma code, lack of

novelty requires a more direct and unambiguous disclosure. Therefore, at least feature **F5** is novel over D6.

4. Remittal

4.1 The main request was refused by the examining division on the grounds that claim 1 was not clear, that claim 1 contained subject-matter extending beyond the content of the application as filed, and that the subject-matter of claim 1 was anticipated by D6.

None of these three reasons for refusal of the main request is considered convincing by the board. As a consequence, the appealed decision must be set aside.

4.2 The decision under appeal dealt only with the compliance of claim 1 of the main request with respect to the requirements of Articles 54(1), 54(3), 84 and 123(2) EPC, without considering any of the other requirements of the EPC, in particular novelty with respect to prior art under Article 54(2) EPC and inventive step (Article 56 EPC). Furthermore, the compliance of claims 2 to 14 with the EPC was only mentioned in an obiter dictum, which is not part of the decision and which cannot replace a thorough examination of these claims. For example, it should be noted that the present main request contains several independent claims in the same category, contrary to the requirement of Rule 43(2) EPC.

4.3 The significant scope of the pending examination of the main request would require the board to go far beyond the primary object of the appeal proceedings, which is to review the appealed decision (Article 12(2) RPBA 2020). This would not be appropriate and constitutes a "special reason" within the meaning of Article 11 RPBA 2020 to

remit the case to the examining division for further prosecution (Article 111(1) EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the examining division for further prosecution.

The Registrar:

The Chairman:



L. Gabor

R. Bekkering

Decision electronically authenticated