

**Internal distribution code:**

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

**Datasheet for the decision  
of 20 January 2023**

**Case Number:** T 2019/18 - 3.5.04

**Application Number:** 13704647.0

**Publication Number:** 2805503

**IPC:** H04N7/26, H04N7/34

**Language of the proceedings:** EN

**Title of invention:**

REDUCED LOOK-UP TABLE FOR LM MODE CALCULATION

**Applicant:**

Huawei Technologies Co., Ltd.

**Headword:**

**Relevant legal provisions:**

RPBA Art. 12(4)

**Keyword:**

Late-filed request - request could have been filed in first instance proceedings (yes)

**Decisions cited:**

G 0010/93, T 1178/08, T 1212/08, T 1108/10

**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 2019/18 - 3.5.04

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.04**  
**of 20 January 2023**

**Appellant:** Huawei Technologies Co., Ltd.  
(Applicant) Huawei Administration Building  
Bantian  
Longgang District  
Shenzhen, Guangdong 518129 (CN)

**Representative:** Körber, Martin Hans  
Mitscherlich PartmbB  
Patent- und Rechtsanwälte  
Sonnenstrasse 33  
80331 München (DE)

**Decision under appeal:** **Decision of the Examining Division of the European Patent Office posted on 19 March 2018 refusing European patent application No. 13704647.0 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairwoman** B. Willems  
**Members:** M. Paci  
G. Decker

## **Summary of Facts and Submissions**

I. The appeal is against the examining division's decision refusing European patent application No. 13704647.0, published as international patent application WO 2013/109901 A1.

II. The decision under appeal was based on the following grounds.

- Claim 1 of the main request and of the auxiliary request contained subject-matter extending beyond the content of the application as filed, contrary to Article 123(2) EPC.
- Claim 1 of the main request and of the auxiliary request did not meet the requirement of clarity under Article 84 EPC.

III. The applicant (hereinafter: "appellant") filed notice of appeal. With the statement of grounds of appeal, it filed amended claims according to a sole request, replacing the sets of claims of the main request and the auxiliary request on which the decision under appeal was based.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the sole request filed with the statement of grounds of appeal. As a precaution, it also requested oral proceedings. The appellant indicated a basis for the claims in the application as filed and provided arguments as to why the claims met the requirements of Articles 54, 56, 84 and 123(2) EPC.

IV. The board issued a summons to oral proceedings and a communication under Article 15(1) RPBA 2020. In this

communication, the board gave the following preliminary opinion.

- a) The claims of the sole request should have been presented before the department of first instance.
- b) The board was inclined to exercise its discretionary power under Article 12(4) RPBA 2007 to hold the sole request inadmissible.

V. By letter dated 2 January 2023, the appellant withdrew its request for oral proceedings and requested a decision on the basis of the file as it stood. The board then cancelled the oral proceedings.

### **Reasons for the Decision**

1. The appeal is admissible.

*Sole request - discretionary power under Article 12(4) RPBA 2007*

2. In the case in hand, the statement of grounds of appeal was filed before the date on which the revised version of the Rules of Procedure of the Boards of Appeal (RPBA 2020) entered into force, i.e. 1 January 2020 (see OJ EPO 2019, A63). Thus, in accordance with Article 25(2) RPBA 2020, Article 12(4) to (6) RPBA 2020 does not apply to the question of whether to admit the sole request. Instead, Article 12(4) of the Rules of Procedure of the Boards of Appeal in the 2007 version (RPBA 2007 - see OJ EPO 2007, 536) continues to apply.

3. Under Article 12(4) RPBA 2007, the board has the discretionary power to hold inadmissible facts, evidence or requests which could have been presented or

were not admitted in the first-instance proceedings. Since, in fact, almost every claim request could have been presented before the department of first instance, the question within that context is whether the situation was such that this request should already have been filed at that stage (see Case Law of the Boards of Appeal of the European Patent Office, 10th edition 2022, "Case Law", V.A.5.11.1 and V.A.5.11.4a)). The board exercises its discretion under Article 12(4) RPBA 2007 having regard to the particular circumstances of the individual case (see e.g. decision T 1178/08, point 2.3 of the Reasons). However, as was held in G 10/93 (OJ EPO 1995, 172, point 4 of the Reasons), "*[p]roceedings before the boards of appeal in ex-parte cases are primarily concerned with examining the contested decision*". Appeal proceedings are not a continuation of examination at first instance or a second, parallel procedure for the substantive examination otherwise to be carried out by the examining division which applicants could freely opt to launch depending on the circumstances (see Case Law, V.A.5.11.4a), in particular the cited decisions T 1108/10 and T 1212/08).

4. According to the appellant, the independent claims of the sole request are based on the independent claims of the auxiliary request on which the decision under appeal was based and from which they differ on account of the following amendments:

**Claim 1:**

1. A High Efficiency Video Coding, HEVC, video codec (400), the HEVC video codec (400) comprising:

[...]

— wherein in a first alternative: the BitDepth is 8,  $4 \leq nS \leq 32$ , at least one  $\Delta p_y' \neq 0$ , and  $p_y'[x, y]$  has a same maximum number of bits, being 8 bits, as  $p[x, y]$ , or

o

o wherein in a second alternative instead of the first alternative: the BitDepth is 10,  $nS \geq 4$ , so that  $4 \leq nS \leq 16$ , at least one  $\Delta p_y' \neq 0$ , and  $p_y'[x, y]$  has a same maximum number of bits, being 10 bits, as  $p[x, y]$ .

o wherein in the first and second alternative  $a_2$  is equal to or larger than

$$\frac{8 * \left( \sum_{y=0}^{nS-1} \Delta p_y'[-1, y]^2 + \sum_{x=0}^{nS-1} \Delta p_y'[x, -1]^2 \right)}{2^{2*k3}},$$

and a value of  $nS$  and a value of BitDepth are chosen so that  $k_3 = 0$ , and furthermore at least one  $\Delta p_y' \neq 0$ ,

o wherein in the first and second alternative a value of ImDiv is determined by using a look-up table indicating a correspondence between a value of  $a_2S$  and a value of ImDiv, wherein a number of  $a_2S$  values is less than 63, wherein each value of  $a_2S$  determines the corresponding value of ImDiv in the look-up table, and wherein the number of  $a_2S$  values is 56, which includes 56  $a_2S$  entries with values from 8-63, wherein when the value of the  $a_2S$  is below 8, the ImDiv is 0.

**Claim 2:**

2. A High Efficiency Video Coding, HEVC, video codec (400), the HEVC video codec (400) comprising:

[...]

o wherein in a first alternative: the BitDepth<sub>C</sub> is 8, 4 ≤ nS ≤ 32, and p'<sub>r</sub>[x,y] has a same maximum number of bits, being 8 bits, as p[x,y], wherein at least one Δp'<sub>r</sub> ≥ 2 or at least four Δp'<sub>r</sub> ≠ 0, or

o wherein in a second alternative instead of the first alternative: the Bit Depth is 10, 4 ≤ nS ≤ 16, and p'<sub>r</sub>[x,y] has a same maximum number of bits, being 10 bits, as p[x,y], wherein at least one Δp'<sub>r</sub> ≥ 2 or at least four

Δp'<sub>r</sub> ≠ 0, nS ≥ 4, so that

o wherein in the first and second alternative,

a2 is equal to or larger than 
$$\frac{8 * (\sum_{y=0}^{nS-1} \Delta p'_r[-1, y]^2 + \sum_{x=0}^{nS-1} \Delta p'_r[x, -1]^2)}{2^{2*k3}},$$

~~and a value of nS and a value of BitDepth<sub>C</sub> are chosen so that k3 = 0, and furthermore at least one Δp'<sub>r</sub> ≥ 2 or at least four Δp'<sub>r</sub> ≠ 0,~~

wherein, in the first and second alternative, a value of lmDiv is determined by using a look-up table indicating a correspondence between a value of a2s and a value of lmDiv, wherein a number of the a2S values is less than 63, wherein each value of a2S determines the corresponding value of lmDiv in the look-up table, and wherein the number of a2S values of the look-up table is 32, which includes 32 a2s entries with values from 32-63, wherein when the value of the a2s is below 32, the lmDiv is 0.



**Claim 5:**

5. A High Efficiency Video Coding, HEVC, method used in video, the method comprising:

[...]

- wherein in a first alternative: the BitDepth is 8,  $4 \leq nS \leq 32$ , at least one  $\Delta p_y' \neq 0$ , and  $p_y'[x, y]$  has a same maximum number of bits, being 8 bits, as  $p[x, y]$ , or
- wherein in a second alternative instead of the first alternative: the BitDepth is 10,  $4 \leq nS \leq 16$ , at least one  $\Delta p_y' \neq 0$ , and  $p_y'[x, y]$  has a same maximum number of bits, being 10 bits, as  $p[x, y]$ ,  $nS \geq 4$ , so that
- wherein in the first alternative and the second alternative,  $a2$  is equal to

or larger than 
$$\frac{8 * (\sum_{y=0}^{nS-1} \Delta p_y'[-1, y]^2 + \sum_{x=0}^{nS-1} \Delta p_y'[x, -1]^2)}{2^{2 * k3}},$$

and a value of  $nS$  and a value of BitDepth are chosen so that  $k3 = 0$ , and furthermore at least one  $\Delta p_y' \neq 0$ ,

- wherein, wherein in the first and second alternative, a value of ImDiv is determined by using a look-up table indicating a correspondence between a value of  $a2s$  and a value of ImDiv,

wherein a number of  $a2s$  values is less than 63,

wherein each value of  $a2s$  determines the corresponding value of ImDiv in the look-up table, and wherein the number of  $a2s$  values is 56 which includes 56  $a2s$  entries with values from 8-63,

wherein when the value of the  $a2s$  is below 8, the ImDiv is 0.

**Claim 6:**

6. A High Efficiency Video Coding, HEVC, method, used in the method video coding comprising:

[ . . . ]

o wherein in a first alternative: the BitDepth is 8,  $4 \leq nS \leq 32$ , and  $p'_y[x, y]$  has a same maximum number of bits, being 8 bits, as  $p[x, y]$ , wherein at least one  $\Delta p_y \geq 2$  or at least four  $\Delta p_y \neq 0$ , or

o wherein in a second alternative instead of the first alternative: the BitDepth is 10,  $4 \leq nS \leq 16$ , and  $p'_y[x, y]$  has a same maximum number of bits, being 10 bits, as  $p[x, y]$ , wherein at least one  $\Delta p_y \geq 2$  or at least four  $\Delta p_y \neq 0$ ,

o wherein in the first alternative and the second alternative wherein  $nS \geq 4$ , so that

a2 is equal to or larger than 
$$\frac{8 * (\sum_{y=0}^{nS-1} \Delta p_y'[-1, y]^2 + \sum_{x=0}^{nS-1} \Delta p_y'[x, -1]^2)}{2^{2*k3}},$$

and a value of  $nS$  and a value of BitDepth are chosen so that  $k3 = 0$ , and furthermore at least one  $\Delta p_y \geq 2$  or at least four  $\Delta p_y \neq 0$ ,

o wherein in the first alternative and second alternative a value of ImDiv is determined by using a look-up table indicating a correspondence between a value of a2s and a value of ImDiv, wherein a number of the a2s values is less than 63,

wherein each value of a2s determines the corresponding value of ImDiv in the look-up table, and wherein the number of a2s values of the look-up table is 32, which includes 32 a2s entries with values from 32-63, wherein when the value of the a2s is below 32, the ImDiv is 0.

5. According to the appellant, these claims add features taken from paragraphs 29, 51, 52, 53 and 58 of the description of the application as filed (see statement of grounds, section "*1. Amendments*").
6. The appellant has not provided any explanation as to why it did not present the claims of the current sole request before the department of first instance.
7. In the months preceding the examining division's decision, the following procedural steps were taken.
  - In a communication dated 10 May 2017 annexed to the summons to oral proceedings scheduled for 26 February 2018, the examining division held that the independent claims of the sole request then on file lacked clarity (Article 84 EPC) and that, as far as they could be understood, their subject-matter did not involve an inventive step (Article 56 EPC).
  - With a letter dated 26 January 2018, the applicant filed amended claims according to a new main request and an auxiliary request (the main request and the auxiliary request on which the decision under appeal was based).
  - By letter dated 30 January 2018, the applicant informed the examining division that it would not be attending the oral proceedings.
  - The oral proceedings were held on 26 February 2018 in the absence of the applicant.

- On 19 March 2018, the examining division's decision was despatched. The grounds for the decision were that the subject-matter of claim 1 of the main request and of the auxiliary request did not meet the requirements of either Article 123(2) EPC or Article 84 EPC.

8. The board is of the view that in filing amended claims one month before the date of oral proceedings and not attending the oral proceedings, the appellant **should have anticipated** that the examining division might raise objections under Articles 123(2) and 84 EPC against the amended claims during the oral proceedings and that the application might be refused on that basis. By not attending the oral proceedings, the appellant forewent the opportunity to put forward new arguments or file amended claims during the oral proceedings in response to these objections. In the board's opinion, the appellant **should** therefore have filed the sole request in hand **before the oral proceedings**, if only as a further auxiliary request, as a precaution in case its written arguments did not convince the examining division.
9. Moreover, the board notes that the additional features introduced into the independent claims with the statement of grounds of appeal (see point 4 above) were not present in any of the claims on which the decision under appeal was based. As a consequence, the subject-matter of the independent claims of the sole request was never examined by the examining division and, most likely, was not even subject to a search.
10. If the board were to admit the sole request into the appeal proceedings, it would thus have to examine and decide on these amended claims for the first time on

appeal, or remit the case to the department of first instance for further prosecution. Neither procedural option is appropriate. These two inappropriate options would never have arisen had these amended claims been presented during the proceedings before the examining division. The appellant should have had the examining division exhaustively assess and then decide on all subject-matter for which it intended to seek protection, even if only on a subsidiary basis, if it wished the board to rule on it.

11. For the above reasons, the board exercises its discretionary power under Article 12(4) RPBA 2007 to hold the sole request inadmissible.

*Result*

12. Since there is no admissible request on file, the appeal must be dismissed.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairwoman:



K. Boelicke

B. Willems

Decision electronically authenticated