Datasheet for the decision
of 21 June 2018

Case Number: T 0830/12 – 3.5.04
Application Number: 03009197.9
Publication Number: 1359741
IPC: H04N1/387, H04N1/053

Language of the proceedings: EN

Title of invention:
Method and apparatus for processing read-out images

Applicant:
FUJIFILM Corporation

Headword:

Relevant legal provisions:
EPC 1973 Art. 56, 111(1)

Keyword:
Remittal to the department of first instance – (yes)

Decisions cited:
Catchword:
Case Number: T 0830/12 - 3.5.04

DECISION of Technical Board of Appeal 3.5.04 of 21 June 2018

Appellant: FUJIFILM Corporation
(Applicant)
26-30, Nishiazabu 2-chome
Minato-ku
Tokyo (JP)

Representative: Klunker IP
Patentanwälte PartG mbB
Destouchesstraße 68
80796 München (DE)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 28 November 2011 refusing European patent application No. 03009197.9 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman C. Kunzelmann
Members: B. Willems
G. Decker
Summary of Facts and Submissions

I. The appeal is against the decision of the examining division dated 28 November 2011 refusing European patent application No. 03009197.9, published as EP 1 359 741 A2.

II. The documents cited in the decision under appeal included the following:

D1: EP 0 901 273 A2

D2: US 5 459 325 A.

III. The decision under appeal was based on the ground that the subject-matter of independent claims 1 and 2 of the sole request filed by letter dated 21 July 2011 lacked inventive step over the disclosure of D2 combined with the common general knowledge of the person skilled in the art (Article 56 EPC).

IV. The applicant filed notice of appeal. With the statement of grounds of appeal, the appellant requested that the impugned decision be set aside and that a European patent be granted on the basis of the claims underlying the decision under appeal. The appellant provided arguments as to why the subject-matter of the claims on file involved an inventive step.

V. The board issued a summons to oral proceedings. In a communication under Article 15(1) RPBA (Rules of Procedure of the Boards of Appeal, OJ 2007, 536), annexed to the summons, the board introduced document D4 (US 4 954 913) into the appeal proceedings and gave the following reasons for its provisional opinion that the subject-matter of claim 1 lacked
inventive step over the disclosure of document D2 combined with the common general knowledge of a person skilled in the art as exemplified by D1 or D4 (Article 56 EPC 1973):

(a) Document D2 was the closest prior art for the assessment of inventive step. It disclosed processing of image signal components acquired during both the forward and the return path. The subject-matter of claim 1 differed from the disclosure of D2 in that smoothing was performed on the image formed of the image signal components acquired during the forward and return path.

(b) The problem formulated by the examining division included a lot of the invention and should be reformulated as improving the quality of images obtained by reciprocal scanning of an optical head.

(c) The person skilled in the art would try to improve the quality of the image obtained by the reciprocal scanning, irrespective of the cause of the quality deterioration. Both D1 and D4 taught "smoothing" a scanned picture to improve its quality by avoiding discontinuities in pixel values. The claim did not include any features which would motivate the person skilled in the art to consider specific causes of image quality deterioration separately from other causes.

The board also indicated that any requests including amended independent claims directed towards the subject-matter of the dependent claims would have to be discussed for the first time in the appeal proceedings. Should the appellant file such requests and the board admit them into the appeal proceedings, the board would
be minded to exercise its discretion and remit the case to the department of first instance for further prosecution under Article 111(1) EPC 1973.

VI. With the reply dated 9 May 2018, the appellant filed amended claims and requested that the decision under appeal be set aside and that a European patent be granted on the basis of "the enclosed set of amended claims 1 to 3" or, as an auxiliary request, that the case be remitted to the examining division for further prosecution. The appellant submitted that the "substance of previous claim 3 has been imported into previous claims 1 and 2" (see page 1 of the letter dated 9 May 2018). The appellant announced that it would not be attending the oral proceedings.

VII. In a communication dated 1 June 2018, the board noted that claim 1 was based on claim 1 filed on 10 February 2011, which the examining division had objected to under Article 84 EPC. In response to this objection, the appellant had amended the claim, thereby preventing the examining division from taking a decision on the basis of the objection. Therefore, the board was minded not to admit the main request into the appeal proceedings (Article 12(4) RPBA) and the auxiliary request would serve no purpose and would not need to be considered by the board.

VIII. With the reply dated 6 June 2018, the appellant filed amended claims replacing the claims on file. It submitted that the amended claims were based on the claims filed with the letter dated 21 July 2011 and the requests filed with the letter dated 9 May 2018 were maintained with respect to the enclosed claims.
IX. On 21 June 2018, oral proceedings were held in the absence of the appellant.

The chairman noted that the appellant had requested that the decision under appeal be set aside and that a European patent be granted on the basis of the claims of the main request filed with the letter dated 6 June 2018 or that the case be remitted to the department of first instance for further prosecution.

At the end of the oral proceedings, the chairman announced the board's decision.

X. Claim 1 reads as follows:

"A method of processing a read-out image, comprising the steps of:

i) performing reciprocal scanning of an optical head (10) relative to an image carrier (1) that carries image information in a main scanning direction and also performing scanning relative to the image carrier (1) in a sub scanning direction that intersects the main scanning direction,

ii) performing photoelectric conversion of light coming from the image carrier (1) and received by the optical head in order to acquire electric image signal components;

iii) acquiring forward scanning image signal components from the forward path of the reciprocal scanning and acquiring backward scanning image signal components from the return path of the reciprocal scanning by using said electric image signal components acquired by the photoelectric conversion during scanning, wherein
the region of the forward path and the region of the return path are different and adjacent in the sub scanning direction and each have a width of one pixel; and

iv) performing smoothing operation processing for smoothing an image formed by forward scanning image display regions represented by the forward scanning image signal components and backward scanning image display regions represented by the backward scanning image signal components, by administering smoothing operations on the forward scanning image signal components and the backward scanning image signal components, which are arranged in the sub scanning direction,

wherein the smoothing operation processing is arithmetic mean calculation processing performed on the forward scanning image signal components and the backward scanning image signal components and with respect to the sub-scanning direction, and the processed image signal, which represents the image information, is formed with the arithmetic mean calculation processing, whereby the smoothing operation processing suppresses differences in image density among the forward scanning image display regions and the backward scanning image display regions, which are adjacent to each other in the sub scanning direction."

XI. The examining division's objections, where relevant to the present decision, may be summarised as follows:

Document D2 was the closest prior art for the assessment of inventive step. The subject-matter of claim 1 then on file differed from the disclosure of D2 in that smoothing was performed on the image formed of
the image signal components acquired during both the forward and return path. The problem to be solved was that the lines scanned during the forward scan and those scanned during the backward scan were shifted/offset against each other, thereby creating positional errors in the resulting image (see decision under appeal, page 3). The person skilled in the art would include smoothing in the known method "to make errors and aberrations less visible" (see decision under appeal, paragraph bridging pages 3 and 4).

In the decision under appeal, section "Obiter Dictum - Other Remarks", the examining division commented that the subject-matter of claim 3 was an "[o]bvious possibility of the person skilled in the art to use an arithmetic mean filter as smoothing filter".

XII. The appellant's arguments, where relevant to the present decision, may be summarised as follows:

(a) Although the search division carried out a "full search on the subject-matter of the original claims including claim 3 which is now included in the independent claims" (see letter dated 9 May 2018, page 2), none of the cited documents supported the examining division's opinion that the subject-matter of previous claim 3 was obvious to the person skilled in the art. Even if documents D1 and D4 disclosed or suggested smoothing a scanned picture, they failed to disclose or suggest that smoothing was performed by arithmetic mean calculation (see letter dated 9 May 2018).

(b) Specific types of "smoothing" provided superior results with respect to better image quality. The "mean calculation processing" was in no way
suggested specifically with respect to the subject-matter of claim 1 (see statement of grounds of appeal, page 5, last paragraph).

Reasons for the Decision

1. The appeal is admissible.

2. Basis for the decision

2.1 According to Article 113(2) EPC, "the European Patent Office shall examine, and decide upon, the European patent application" only in the text submitted to it by the applicant.

2.2 With the letter dated 6 June 2018, the appellant submitted that enclosed "replacement claims 1 to 3 [are] intended to replace the claims filed with our letter of 09.05.2018" and "[t]hese claims are based on the claims filed with the letter dated 21 July 2011".

2.3 The clean version of the set of claims enclosed with the letter dated 6 June 2018 comprises claims 1 and 2. In the "track changes" version, claim 6, which corresponds to claim 3 submitted on 9 May 2018, has been actively deleted. Therefore, the board concludes that there is a manifest error in the cover letter and a decision should be taken on the basis of submitted claims 1 and 2.

2.4 Claim 1 filed on 6 June 2018 reads "whereby the smoothing operation processing suppresses differences in image density", whereas claim 1 filed on 21 July 2011 reads "wherein the smoothing operation processing suppresses differences in image density" (emphasis added). Since the phrase following
"whereby" or "wherein" defines the same result of the smoothing operation processing, the possibly different meaning of the adverbs "whereby" and "wherein" does not affect the board's assessment of the case.

3. Main request - admission into the proceedings

The appellant's main request was filed in response to a communication of the board. It thus constitutes an amendment to the appellant's case after the grounds of appeal had been filed and may be admitted and considered at the board's discretion (Article 13(1) RPBA).

Present claim 1 combines claims 1 and 3 forming the basis for the decision. The amendments address the board's objection set out in section 3 and take into account its remarks set out in section 4 of the communication under Article 15(1) RPBA. Therefore, the board, exercising its discretion under Article 13(1) RPBA, admits the appellant's main request into the proceedings.

4. Main request - allowability (Article 111(1), first sentence, EPC 1973)

In response to the board's communication dated 1 June 2018, the appellant filed amended claims with amended claim 1 combining claims 1 and 3 forming the basis for the decision. Since the examining division refused the application on the sole ground that the subject-matter of then independent claims 1 and 2 lacked inventive step, the reason for refusing the application no longer applies. Therefore, the appeal is allowable.
5. Remittal (Article 111(1), second sentence, EPC 1973)

5.1 According to Article 111(1), second sentence, EPC 1973, the board, in deciding upon the appeal, may exercise any power within the competence of the department which was responsible for the appealed decision or remit the case to that department for further prosecution.

However, it is not normally the function of the board of appeal to consider and decide upon questions which were raised for the first time during the appeal (see also Case Law of the Boards of Appeal of the European Patent Office, 8th edition 2016, IV.E.7.6.2).

5.2 Were the board not to remit the case to the department of first instance, it would have to carry out a full examination as to patentability on the basis of a claim including the features of previous dependent claim 3. This is primarily the task of the examining division (see point 4 of the reasons for the decision of the Enlarged Board of Appeal in G 10/93, OJ EPO 1995, 172).

5.3 To determine whether the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person, the boards apply the "could-would approach". When considering whether or not claimed subject-matter constitutes an obvious solution to an objective technical problem, the question to be answered is whether or not the skilled person would, rather than could, have modified the teaching in the closest prior art document in the light of other teachings in the prior art so as to arrive at the claimed invention (see also Case Law of the Boards of Appeal of the European Patent Office, 8th edition 2016, I.D.5). The technical problem has to be formulated in such a way that it does
not contain pointers to the solution or partially anticipate the solution (see also Case Law of the Boards of Appeal of the European Patent Office, 8th edition 2016, I.D.4.3.1).

5.4 The problem formulated by the examining division contained a pointer to the proposed solution. It is not apparent to the board whether, on proper formulation of the problem (see point V(b) above), the examining division would also have come to the conclusion that the claimed subject-matter lacked inventive step.

5.5 The examining division's general statement with regard to then dependent claim 3 that it was an "obvious possibility of the person skilled in the art to use an arithmetic mean filter as smoothing filter" does not allow the board to ascertain why the examining division considered that arithmetic mean filtering was an obvious choice in the context of the present application (see also statement of grounds of appeal, page 5, penultimate paragraph). The examining division did not provide any reasoning as to why the person skilled in the art would choose this particular filter. It did not, for instance, indicate any criteria the person skilled in the art would consider when choosing a smoothing filter suitable to suppress differences in image density in reciprocal scanning.

5.6 It is also not apparent to the board whether the examining division considered smoothing an image formed of the image signal components acquired during both the forward and return path and smoothing using arithmetic mean calculation as a combination of features or a mere juxtaposition of features.
Whereas the board agrees with the appellant that the examining division did not cite a document "which might support the contention" that the subject-matter of previous claim 3 belonged to the prior art (see point XII(a) above), it concurs with the examining division that arithmetic mean calculation is a common implementation of a filter for smoothing an image (see point XI above). However, the examining division did not address the question whether the combination of forward and backward scanning and arithmetic mean calculation achieves results over and above the sum of the effects of forward and backward scanning and arithmetic mean calculation.

5.7 In the communications dated 17 March 2011 (see the paragraph bridging pages 3 and 4) and 12 August 2011 (see page 3, third paragraph), the examining division reasoned that an arithmetic mean filter has "well documented results". With the statement of grounds of appeal, the appellant introduced the argument that specific types of smoothing, such as arithmetic mean processing as defined in then claim 3, provided "superior results" (see point XII(b) above). This argument could not have been assessed by the examining division and the board would have to examine for the first time whether arithmetic mean processing specified in present claim 1 provided the alleged "superior results" in the context of the claimed reciprocal scanning.

5.8 Summarising, were the board not to remit the case to the department of first instance, it would have to elaborate for the first time on the issues set out in points 5.4 to 5.7 above. This is primarily the task of the examining division.
5.9 Therefore, the board decided to use its discretion under Article 111(1), second sentence, EPC 1973 and remit the case to the department of first instance.

**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.

The Registrar: The Chairman:

K. Boelicke C. Kunzelmann

Decision electronically authenticated