Datasheet for the decision of 19 October 2011

Case Number: T 0561/08 - 3.5.04
Application Number: 00104362.9
Publication Number: 1035727
IPC: H04N1/407, H04N1/387, H04N1/60
Language of the proceedings: EN
Title of invention: Printer and printing method
Applicant: Sony Corporation
Headword: Relevant legal provisions:
EPC 1973 Art. 56
Keyword: Inventive step (no)
Decisions cited:

Catchword:
DECISION
of the Technical Board of Appeal 3.5.04
of 19 October 2011

Appellant: 
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Decision under appeal: 
Decision of the Examining Division of the European Patent Office posted 18 October 2007 refusing European patent application No. 00104362.9 pursuant to Article 97(1) EPC 1973

Composition of the Board:
Chairman: F. Edlinger
Members: M. Paci
B. Müller
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse European patent application No. 00 104 362.9, published as EP 1 035 727 A2.

II. The decision under appeal is, as requested by the applicant, a decision according to the state of the file (EPO FORM 2061) referring to previous communications dated 22 June 2005 and 1 February 2007 for its grounds. In these two communications the following prior-art document, inter alia, had been cited:


In the communication dated 1 February 2007 the examining division had held, inter alia, that the subject-matter of claim 1 did not involve an inventive step (Article 56 EPC 1973) in view of D1.

III. With the statement of grounds of appeal the appellant filed three sets of amended claims according to a main request, a first auxiliary request and a second auxiliary request, respectively, and submitted arguments in support of the patentability of these claims.

IV. In a communication accompanying the summons to oral proceedings the board, inter alía, expressed the preliminary opinion that the subject-matter of claim 1 according to each of the requests did not involve an inventive step (Article 56 EPC 1973) in view of D1 and common general knowledge.
V. With a letter dated 19 September 2011, the appellant withdrew his request for oral proceedings, requested a decision "on the basis of the file as it stands" and informed the board that he would not attend the oral proceedings if these were maintained. That letter contained no submission on substantive matters.

VI. Oral proceedings were held by the board on 19 October 2011. As announced, the appellant was not represented. At the end of the oral proceedings the board announced its decision.

VII. The appellant's requests according to the file as it stands are that the decision under appeal be set aside and that a patent be granted on the basis of the set of claims 1 to 7 according to the main request, first or second auxiliary requests, all filed with the statement of grounds of appeal.

VIII. Independent claim 1 according to the main request reads as follows:

"A printer (1) to print a final image, comprising an image processing means (6) operable, when a predetermined operation mode is selected, too [sic] apply predetermined image processing to a print data (DPR, DPG, DPB) originating from a first print data (DP) generating print image data (DPR1, DPG1, DPB1) of images of a frame image (F0, F1, F2), wherein the frame image (F0, F1, F2) comprises only a first image (P0) and second images (P1, P2, P3, P4, P5, P6), whereby said second images surround and are adjacent to said first image, wherein the print image data (DPR1, DPG1, DPB1) of the second images (P1, P2, P3, P4, P5, P6) vary by a ..."
constant absolute value in at least one parameter value from the print data (DPR, DPG, DPB) of the first image (P0),

wherein the second images (P1, P2, P3, P4, P5, P6) are arranged in the frame image (F0, F1, F2) in a two-dimensional array in a predetermined pattern to represent at least three changing parameter values,

an operation input means (2) operable to detect an user input selecting the predetermined operation mode and/or one image of the frame image (F0, F1, F2) as first image (P0) or final image, and

a printing means (7) operable to print the final image or the frame image (F0, F1, F2) on a printing medium."

Claims 2 to 7 according to the main request have no bearing on the present decision.

IX. Independent claim 1 according to the first auxiliary request differs from claim 1 according to the main request by the following underlined text portions:

"A printer (1) to print a final image, comprising ...

wherein the print image data (DPR1, DPG1, DPB1) of the second images (P1, P2, P3, P4, P5, P6) vary by a constant absolute value in at least one parameter value from the print data (DPR, DPG, DPB) of the first image (P0),

whereby said second images are obtained by applying the color adjustment in plus or minus direction for each of the colors red, green and blue,

wherein the second images (P1, P2, P3, P4, P5, P6) ..."

Claims 2 to 7 according to the first auxiliary request have no bearing on the present decision.
X. Independent claim 1 according to the second auxiliary request differs from claim 1 according to the first auxiliary request by the following underlined text portions:

"A printer (1) to print a final image, comprising ... wherein the second images (P1, P2, P3, P4, P5, P6) are arranged in the frame image (F0, F1, F2) in a two-dimensional array in a predetermined pattern to represent at least three changing parameter values, said at least three changing parameter values comprise said colors red, green and blue, an operation input means (2) operable ..."

Claims 2 to 7 according to the second auxiliary request have no bearing on the present decision.

XI. The examining division's reasoning in the decision under appeal (by reference to the communication dated 1 February 2007) regarding claim 1 then on file can be summarised, insofar as it is of relevance to the present decision, as follows:

D1 discloses a printer having all the features of the printer of claim 1 except for the feature that the second images arranged in the frame image in a two-dimensional array in a predetermined pattern represent "at least three changing parameter values".

However, the skilled person would notice that, in order to arrive at a final image the way of arranging the thumbnails as disclosed in D1, e.g. by varying brightness and only one colour bias (figures 6 to 8), leads to a large number of printed pages if all colour
bias values need to be adjusted. The skilled person would therefore try to improve the arrangement of the thumbnails to be more efficient and would use a layout which allowed adjustment of the three colour dimensions in just one frame image. D1 even points towards using higher dimensional arrays in column 10, lines 16 to 18.

Therefore the subject-matter of claim 1 does not involve an inventive step.

XII. The appellant essentially argued as follows with respect to the alleged lack of inventive step when starting from D1 as closest prior art:

Main request

D1 is considered as the closest prior art. While D1 discloses a two-dimensional image array wherein two properties are selectable (column 8, lines 29 to 35), in the present invention the second images are arranged in the frame image in a two-dimensional array in a predetermined pattern to represent at least three changing parameter values.

Moreover, D1 does not disclose second images comprising at least three changing parameter values which are adjacent to the first image.

The objective task of the present invention is to provide means to clearly and simply show different second images being printed on a printing medium for a quick and prompt selection of a final image. This problem is solved by features of claim 1 and not suggested in any of the prior art documents.
First auxiliary request

The additional feature of claim 1 of applying the colour adjustment in plus or minus direction for each of the colours red, green and blue is not disclosed by any of the prior art documents and emphasizes how the second images are processed.

Second auxiliary request

The additional feature of claim 1 emphasizes that the second images are arranged based on the colours red, green and blue. As known by a person skilled in the art, a colour model for displaying is not the inverse of a colour model for printing. This is only true in case of displaying different colour models but not for the conversion between displaying and printing colour models. A person skilled in the art would rather consider using the colours cyan, magenta and yellow as the parameters to be selected since the selected image is about to be colour printed. It is known that colour printing is performed with the colour model CMY, while displaying pictures is performed with the RGB colour model.

Reasons for the Decision

1. The appeal is admissible.

Main request

Inventive step (Article 56 EPC 1973)

2. Closest prior art and distinguishing features
It is undisputed that D1 can be regarded as the closest prior art and that it does not disclose that the two-dimensional array of second images represents "at least three changing parameter values".

The appellant argued that also the feature that "said second images surround and are adjacent to said first image", which was added in claim 1 for the first time with the statement of grounds, was also not disclosed by D1.

Regarding the construction of this last feature, the board gave the provisional opinion in the communication annexed to the summons to oral proceedings that "[i]n the absence of more specific wording, the board construes the adjective 'adjacent' as referring to the second images as a group, not to each of the second images individually". The board went on to conclude that based on this construction this feature was disclosed in figures 6 to 8 of D1.

The appellant did not comment on this construction of claim 1 in his letter of reply dated 19 September 2011.

The board still considers that the only distinguishing feature of the subject-matter of claim 1 with respect to D1 is that the two-dimensional array of second images represents "at least three changing parameter values".

3. Obviousness

In the aforementioned provisional opinion the board also drew the appellant's attention to the following points:
"In the board's view, it would have been obvious to the skilled person, based either on common general knowledge or D7 or D8 [two other documents cited by the examining division], that the second images could have been arranged in many different obvious manners around the first image. Since in D1 at least four parameters needed adjustment (see figures 6 to 8), it would have been an obvious alternative to form a two-dimensional array with at least three changing parameter values. [...] the skilled person is aware that a trade-off must be found between offering more images to choose from and keeping the pairs of images to be compared as close as possible to each other in order to facilitate the comparison." (emphasis added)

The appellant did not reply to any of the above arguments of the board in his letter of 19 September 2011.

4. The appellant's arguments

The appellant did not put into question the board's view that it was common general knowledge for the skilled person that a trade-off had to be found between offering more images to choose from and keeping the pairs of images to be compared as close as possible to each other in order to facilitate the comparison.

As a result, there is nothing in the appellant's submissions before the board which attempts to refute the board's view that the provision of at least three changing parameter values was obvious having regard to D1 and common general knowledge.
5. Conclusions

For the above reasons, the subject-matter of claim 1 according to the main request does not involve an inventive step.

Hence the appellant's main request is not allowable.

First and second auxiliary requests

Inventive step (Article 56 EPC 1973)

6. Claim 1 according to the first auxiliary request only differs from claim 1 according to the main request by the additional feature that "said second images are obtained by applying the color adjustment in plus or minus direction for each of the colors red, green and blue".

Claim 1 according to the second auxiliary request only adds to claim 1 according to the first auxiliary request that "said at least three changing parameter values comprise said colors red, green and blue".

As already stated in the board's provisional opinion annexed to the summons to oral proceedings, D1 (see, in particular, figures 6 to 8) discloses that the colours red, green and blue are among the parameters which are each varied in plus and minus directions. The board's reasoning under points 2 to 5 above therefore also applies to the subject-matter of claim 1 according to the first and second auxiliary requests.

The appellant's arguments regarding the first and second auxiliary requests emphasize differences with other prior art documents but do not address the
board's reasoning based on D1 and common general knowledge because D1 uncontestedly discloses changing parameters comprising one of the colours red, green and blue in combination with brightness (D1, figures 6 to 8). In the board's view, applying the adjustment for each of the colours red, green and blue merely constitutes an obvious manner of arranging the second images around the first image in order to allow a quick and prompt selection of a final image.

For the above reasons, the board concludes that the subject-matter of claim 1 according to each of the first and second auxiliary requests does not involve an inventive step in view of D1 and common general knowledge.

7. Accordingly, the first and second auxiliary requests are not allowable.

Conclusion

8. Since none of the appellant's main request, first or second auxiliary requests is allowable, the appeal must be dismissed.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:                The Chairman:

K. Boellicke                  F. Edlinger

Decision electronically authenticated