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**Datasheet for the decision
of 26 September 2013**

Case Number: T 0795/11 - 3.4.03

Application Number: 05019002.4

Publication Number: 1736936

IPC: G07D11/00, B65B27/08

Language of the proceedings: EN

Title of invention:

Sheet processing apparatus

Applicant:

Kabushiki Kaisha Toshiba

Headword:

Relevant legal provisions:

EPC 1973 Art. 56, 113(1)
RPBA Art. 15

Keyword:

Inventive step - main request (no) - auxiliary request (no)

Decisions cited:

T 1194/97, T 0602/03

Catchword:



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 0795/11 - 3.4.03

**D E C I S I O N
of Technical Board of Appeal 3.4.03
of 26 September 2013**

Appellant: Kabushiki Kaisha Toshiba
(Applicant) 1-1 Shibaura 1-chome,
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Tokyo 105-8001 (JP)

Representative: Kramer - Barske - Schmidtchen
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 2 December 2010
refusing European patent application No.
05019002.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: G. Eliasson
Members: T. M. Häusser
T. Bokor

Summary of Facts and Submissions

I. The appeal concerns the decision of the examining division refusing the European patent application No. 05 019 002 for added subject-matter (Article 123(2) EPC) in relation to the main request and for lack of inventive step (Article 56 EPC 1973) in relation to the auxiliary request.

II. The appellant was duly summoned to attend oral proceedings before the board.

In a communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal of the European Patent Office (RPBA, OJ EPO 2007, 536), annexed to the summons to oral proceedings, the board expressed its preliminary opinion regarding clarity and basis of amendments and stated that the issue of inventive step would be discussed during the oral proceedings.

In response to the summons to oral proceedings the appellant submitted new claims according to the main and auxiliary requests.

Oral proceedings were held before the board in the absence of the appellant, of which the board had been informed by telephone.

III. The appellant requested in writing that the decision under appeal be set aside and that a patent be granted on the basis of one of the following requests:

Claim 1 of the main request
or alternatively
Claim 1 of the auxiliary request

both filed with letter dated 26 August 2013.

IV. The following documents are referred to in this decision:

D1: US 2004/0003980 A1,

D2: DE 297 22 272 U1.

V. The wording of claim 1 according to the main and auxiliary requests reads as follows (labelling "(1)", "(2)", "(1)'" and "(2)'" by the board):

Main request:

"1. A sheet processing apparatus comprising:

a sealing mechanism (54) adapted to wrap a paper band (S) around sheets for every preset number and to seal the sheets,

a printing mechanism (55) adapted to print information on the paper band (S) used to seal the sheets by the sealing mechanism (54), and

a setting section (80) adapted to set printing contents to be printed on the paper band (S) by the printing mechanism (55), characterized by further comprising

(1) a display section (82) adapted to display first edge positions (E1 (Gray), E1 (Red), E1 (Blue), E1 (Beige) and E1 (Green)) and second edge positions (E2 (Gray), E2 (Red), E2 (Blue), E2 (Beige) and E2 (Green)) corresponding to plural bill types,

(2) wherein the first and second edge positions are together indicative of an area which is a front surface and an area which is a side surface of a bundle of the sheets when the preset number of sheets are wrapped with the paper band along with an image of the paper

band (S) obtained when the printing contents set by the setting section (80) are printed on the paper band (S) by the printing mechanism (55)."

Auxiliary request:

"1. A sheet processing apparatus which seals sheets for every preset number, comprising:

 a sealing mechanism (54) adapted to wrap a paper band (S) around sheets for every preset number and to seal the sheets,

 a printing mechanism (55) adapted to print information on the paper band (S) used to seal the sheets by the sealing mechanism (54), and

 a setting section (80) adapted to set printing contents to be printed on the paper band (S) by the printing mechanism (55), characterized by further comprising

(1)' a display section (82) adapted to display a pair of bars, which mark a first (E1) and second (E2) edge positions of a paper band for a bundle of sheets when the paper band is wrapped around the bundle of sheets and the sheets are sealed,

(2)' wherein the area on the left-hand side of first edge position (E1) is defined as front surface, the area between the first edge position (E1) and the second edge position (E2) is defined as side surface and the area on the right-hand side of the second edge position (E2) is set as the back surface of the bundle of sheets, wherein the display section is adapted to display the pair of bars (E1, E2) together with an image on the paper band (S) obtained when the printing contents set by the setting section (80) are printed on the paper band (S) by the printing mechanism (55)."

VI. In relation to inventive step the appellant argued essentially as follows:

The subject-matter of claim 1 according to the auxiliary request as refused differed from D1 in that the display section displayed edge positions of a bundle of sheets such that a user could readily determine what part of the paper band would be on the front, the side and the back face of the bundle, when the paper band was wrapped around the bundle of sheets.

The technical problem solved was the enablement of a correct position of a text in dependency of varying bundle thicknesses. The distinguishing features contributed to solving this problem and therefore needed to be considered when assessing inventive step.

Documents D2 and D3 neither disclosed nor rendered obvious to display edge positions indicative of a front surface and a side surface of a bundle of sheets.

Therefore, the subject-matter of claim 1 according to the main and auxiliary request as refused involved an inventive step.

Reasons for the Decision

1. Admissibility

The appeal is admissible.

2. Procedural matters

2.1 Claim 1 of the main request and claim 1 of the auxiliary request were submitted in response to the summons to oral proceedings before the board. The duly

summoned appellant was not represented at the oral proceedings. The proceedings were however continued without the appellant in accordance with Rule 71(2) EPC 1973. In view of Article 113(1) EPC 1973, the board had to consider whether it was in a position to decide on these claims.

- 2.2 According to Article 15(3) RPBA, the board "shall not be obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying only on its written case". The purpose of oral proceedings is to give the party the opportunity to present its case and to be heard. However, a party gives up that opportunity if it does not attend the oral proceedings.

It is established case law of the boards of appeal that an appellant who submits amended claims shortly before the oral proceedings and subsequently does not attend these proceedings must expect a decision based on objections which might arise against such claims in his absence (see e.g. T 602/03, point 7 of the Reasons). Therefore, an appellant who submits new claims after oral proceedings have been arranged but does not attend these proceedings must expect that the board decides that the new claims are not allowable because of deficiencies, such as for example lack of inventive step.

- 2.3 In the present case, claim 1 of the main and auxiliary requests were found to lack inventive step as detailed below. The appellant had to expect a discussion during oral proceedings on inventive step of the subject-matter of its newly filed claims, in particular because the board had made the preliminary remark in the

communication under Article 15(1) RPBA that this issue would be discussed at the oral proceedings.

Furthermore, the amendments submitted in response to the summons to oral proceedings were merely attempts to overcome the objections regarding clarity and basis of amendments but did not aim to address the issue of inventive step. This is also clear from the accompanying letter in which clarity and the basis of amendments are discussed but inventive step is not mentioned.

Due to the appellant's absence in the oral proceedings, relevant issues regarding inventive step could not be discussed with the appellant. However, a duly summoned appellant who by his own volition does not attend the oral proceedings cannot be in a more advantageous position than he would have been in if he had attended. The voluntary absence of the appellant can therefore not be a reason for the board not to raise issues it would have raised if the appellant had been present.

Since the appellant did not appear in order to explain why the subject-matter of the claims involved an inventive step, the board could only rely on the appellant's written submissions. The voluntary absence of the appellant was not a reason for delaying a decision and the board was also in a position to decide at the conclusion of the oral proceedings, since the case was ready for decision (Article 15(5) and (6) RPBA).

3. Auxiliary request - inventive step

3.1 Closest state of the art

In the decision under appeal the examining division regarded document D1 as the closest state of the art. The appellant also used document D1 as the starting point of its assessment of inventive step.

Indeed, document D1 is conceived for the same purpose as the invention, namely to provide a sheet processing apparatus for sealing a preset number of sheets, and has the most relevant technical features in common with it. Document D1 is therefore regarded as the closest state of the art.

3.2 Differing features

3.2.1 Document D1 discloses (see paragraphs [0206]-[0207], [0256]-[0257], [0272]-[0278]; Figures 17, 18, 31) a strapping unit 1750 for binding stacks of currency bills together into straps of currency 1800 with the aid of strapping bands 1810. The strapping unit 1750 may include a printer adapted to spray an appropriate colour coding and/or print indicia, e.g. the time and date of the strapping or the sequence/batch number, onto blank strapping material before it the bills are strapped. A user interface may be provided which is adapted to receive instructions from an operator as to what information should be added to the strapping material.

3.2.2 Consequently, document D1 discloses, using the wording of claim 1 of the auxiliary request, a sheet processing apparatus (strapping unit 1750) which seals sheets (currency bills) for every preset number, comprising:
a sealing mechanism (strapping mechanism wrapping the strapping band 1810 around the stack of bills) adapted to wrap a paper band (strapping band 1810)

around sheets (currency bills) for every preset number and to seal the sheets,

a printing mechanism (printer) adapted to print information (indicia) on the paper band (strapping band 1810) used to seal the sheets (currency bills) by the sealing mechanism, and

a setting section (user interface) adapted to set printing contents to be printed on the paper band (strapping band 1810) by the printing mechanism (printer).

3.2.3 Document D1 does not disclose features (1)' and (2)' of claim 1 of the auxiliary request (see point V. above).

3.3 Objective technical problem

3.3.1 The examining division referred to the decision T1194/97 (OJ EPO 2000, 525) of the Boards of Appeal and distinguished between the functional and the cognitive content of the edge positions. Their functional content reflected the delimitation of printable areas by means of border markings. By contrast, their cognitive content merely indicated the start and end of the front, the side and the back face of a bundle of banknotes and targeted human perception as to where the different faces started and ended. The examining division did not consider the cognitive content to have technical character and consequently ignored it in its assessment of inventive step.

3.3.2 The board disagrees with this finding and does not consider the bars which mark first and second edge positions to have any "cognitive content" within the meaning of this expression in the decision T 1194/97 at all. Rather, their purpose is purely functional allowing the printed matter to be suitably placed on

the front surface, side surface and back surface of the bundle of sheets. In this way the printed matter can be properly seen and recognized. This is of particular importance when several of such bundles of sheets are stacked.

Human perception only comes into play when the sheet processing apparatus is actually used by a human operator in order to suitably place the matter to be printed on the paper band. This is however not considered to be detrimental to the technical character of the claimed display section adapted to display the bars marking the edge positions. Their purpose of *allowing* the printed matter to be suitably placed is achieved independently of how the apparatus is in fact used.

Furthermore, in the present context it could even be imagined that the operation of the sheet processing apparatus is automated by means of appropriate image recognition and control means thus obviating any need for human intervention and perception.

3.3.3 The appellant is of the opinion that the objective technical problem was to allow text to be positioned correctly on the paper band depending on varying bundle thicknesses. In view of the above, the board agrees with this formulation.

3.4 Obviousness

3.4.1 Document D2 discloses (see the Figures and page 7, second paragraph - page 14, last paragraph) a printing device for a tape to be used as a label. A printer 1 comprises a printing head 16, the label tape 4 and a colour tape 12. The label tape 4 has an upper layer for

receiving the image and a lower adhesive layer covered by a backing layer. The printing head 16, which comprises an array of pixels, is controlled in such a way as to transfer colour particles from the colour tape 12 to the label tape 4.

The printer is connected to a computer 54, which comprises a microprocessor chip 100, a display 108 and a keyboard 106. Data to be printed are entered using the keyboard 106 and displayed on the display 108. When the data are to be printed, a printing process is started and the data are sent to the printing head 16. After printing a cutter 17 cuts off lengths of printed tape to form a label.

A label may consist of a plurality of pages which are printed next to each other. The user may define for each page a separate printing format, font size and number of lines to be printed. Figure 3 shows an example of a label comprising three pages and Figures 4a to 4d show how such a label could be composed. In a first step the display 108 shows the outline of the label. The user can then set different colours for pages 1 to 3, e.g. black for pages 1 and 3 and red for page 2. All elements (text, ...) on a given page then have the set colour. In order to define various colour regions, a cursor CP can be moved on the display. In case an element, e.g. a word, crosses a border between regions having two different colours, the element obtains the colour of the left colour region and is shown in that colour on the display 108. The label shown in Figure 3 comprises text elements on the three pages which have different orientations.

In Figures 3, 4a to 4d and 6 dashed lines are shown which separate the various colour regions. Concerning

the dashed lines in Figure 3 it is stated in the description (D2, page 10, first paragraph) that they are shown for "diagrammatic purposes" and that they will not appear on the finished label.

- 3.4.2 The appellant did not contest that the skilled person would consider D2 in order to solve the posed problem.

The invention is considered to reside in the technical field of sheet sealing and document D2 in the technical field of label printing. These are regarded to be neighbouring technical fields. Furthermore, the technical problem of correct positioning of text arises also in the field of label printing. The skilled person would therefore consult document D2 when attempting to solve the posed problem of allowing text to be positioned correctly on the paper band depending on varying bundle thicknesses.

- 3.4.3 The appellant argued that document D2 did not disclose or render obvious to display edge positions indicative of a front surface and a side surface of a bundle of sheets.

- 3.4.4 As indicated above, the dashed lines shown in Figure 3 of document D2 are shown only for diagrammatic purposes. Therefore, it cannot be deduced from D2 that any markings are shown on the display which would indicate the border between two regions having different colours. However, a text element may be moved from one place of the image of the label to another and changes its colour when the left end of the element crosses the border between two colour regions. Such borders are therefore evident for the operator when he uses the display to compose a label.

- 3.4.5 The labels of D2 comprise an adhesive layer in order to be attached to a surface. No further details are provided in document D2 regarding what type of object the label could be attached to.

Figure 3 of document D2 shows the expressions "Esselte Dymo Labelling", "Dymo" and "Esselte Dymo" arranged on the three pages of a label, respectively. "Esselte" and "Dymo" are apparently trade marks of the applicant company Esselte N.V. of the utility model D2. The expressions have different colours, fonts and font sizes and are arranged in different orientations: whereas the expressions on pages 1 and 2 are oriented horizontally, the expression on page 3 is oriented vertically.

Hence Figure 3 shows the capabilities of the apparatus of document D2 to make different kinds of labels. Given the different orientations of the text elements in Figure 3, it is the board's opinion that it would occur to the skilled person that the label is adapted to be attached to an object having three faces. The borders between the pages would then correspond to the edges between the faces of the object.

- 3.4.6 In view of the above, the board is of the opinion that the skilled person would - in order to solve the problem of allowing text to be correctly positioned on the paper band - adapt the user interface of document D1 using the teaching of document D2. In particular, he would realize that the side surface of the bundle of sheets corresponds to page 2 of the label shown in Figure 3, whereas the front and back surfaces correspond to pages 1 and 3 of that label.

The skilled person would thus arrive at a user interface in which the image of the front surface, side surface and back surface of the stack of currency bills corresponded to different colour regions the border between which would be evident for the user since text changed colour if it were dragged from one region to another. Moreover, it is regarded to be within the skilled person's common skills to use bars to mark the borders between the colour regions in order to make them permanently visible thus allowing text to be correctly positioned in a more efficient way.

It would therefore be obvious for the skilled person to arrive at features (1)' and (2)' of claim 1 of the auxiliary request when attempting to solve the posed objective technical problem.

Therefore, the subject-matter of claim 1 of the auxiliary request lacks inventive step within the meaning of Article 56 EPC 1973.

4. Main request - inventive step

Claim 1 of the main request essentially differs from claim 1 of the auxiliary request in that in feature (1) of claim 1 of the main request it is specified that the display section is adapted to display first and second edge positions "corresponding to plural bill types" and in that otherwise the characteristics of features (1)' and (2)' of claim 1 of the auxiliary request are defined in somewhat broader terms using the features (1) and (2) of claim 1 of the main request.

As mentioned under point 3.2.1 above document D1 discloses that the strapping unit 1750 binds stacks of currency bills together into straps of currency 1800

with the aid of a strapping bands 1810. Therefore, for reasons corresponding to those above, it would be obvious for the skilled person to display on the user interface first and second edge positions corresponding to the various currency bill types. Hence, it would be obvious for the skilled person to arrive at features (1) and (2) of claim 1 of the main request when attempting to solve the posed objective technical problem.

Consequently, the subject-matter of claim 1 of the main request lacks inventive step within the meaning of Article 56 EPC 1973.

5. Conclusion

As neither the main request nor the auxiliary request is allowable, the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



S. Sánchez Chiquero

G. Eliasson

Decision electronically authenticated