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**Datasheet for the decision
of 17 October 2017**

Case Number: T 0596/12 - 3.5.06

Application Number: 08154818.2

Publication Number: 1983427

IPC: G06F9/44

Language of the proceedings: EN

Title of invention:
Apparatus for providing a user interface

Applicant:
CANON EUROPA N.V.

Headword:
Printer user interface/CANON EUROPA N.V.

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

This datasheet is not part of the Decision.
It can be changed at any time and without notice.

Catchword:

Case Number: T 0596/12 - 3.5.06

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 17 October 2017

Appellant:	CANON EUROPA N.V.
(Applicant)	Bovenkerkerweg 59-61
	NL-1185 XB Amstelveen (NL)
Representative:	Garner, Jonathan Charles Stapleton
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 25 October 2011
refusing European patent application No.
08154818.2 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman	W. Sekretaruk
Members:	A. Teale
	S. Krischer

Summary of Facts and Submissions

I.   This is an appeal against the decision, dispatched with reasons on 25 October 2011, to refuse European patent application No. 08 154 818.2 on the basis that the subject-matter of claim 1 did not involve an inventive step, Article 56 EPC, in view of the following document:

D1: US 2003/0011633 A1

and notorious prior art.

II.   A notice of appeal was received on 15 December 2011 in which the appellant requested that the decision be cancelled in its entirety. The appeal fee was paid on the same day.

III.   With a statement of grounds of appeal, received on 2 March 2012, the appellant submitted amended claims according to new main and auxiliary requests. The appellant requested that the decision be set aside and that a patent be granted on the basis of said main and auxiliary requests. The appellant also made an auxiliary request for oral proceedings.

IV.   In an annex to a summons to oral proceedings the board introduced the following document (cited in paragraph [0003] of D1):

D5: US 5 937 150 A

under Article 114(1) EPC. The board expressed the preliminary opinion that the subject-matter of claim 1 of both requests seemed to lack inventive step starting from *inter alia* D5.

V.   With a response, received on 15 September 2017, the
          appellant filed an amended description and amended
          claims according to a new main and first and second
          auxiliary requests.

VI.   At the oral proceedings, held on 17 October 2017, the
          appellant requested that the decision under appeal be
          set aside and that a patent be granted on the basis of
          the main request, or the first or the second auxiliary
          request, all filed on 15 September 2017. At the end of
          the oral proceedings the board announced its decision.

VII.   The application is thus being considered in the
          following form:

          Description (all three requests):
          pages 1 to 21, received on 15 September 2017.

          Claims (all received on 15 September 2017):
          Main request: 1 to 7.
          First auxiliary request: 1 to 7.
          Second auxiliary request: 1 to 6.

          Drawings (all three requests):
          Pages 1/5 to 5/5, as originally filed.

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

          "An apparatus for providing a user interface
          comprising: a printer (1) for displaying a user
          interface, computer means (2) connected to the printer
          and configured to provide user-interface information to
          the printer (1), wherein the printer (1) is configured
          to allow a user to interact with print management
          software on the computer means (2) via a user interface
          displayed on the printer (1), and wherein the apparatus

is configured so that the computer means (2) sends
user-interface information to the printer (1) to allow
the printer (1) to display a plurality of panes of the
user interface to the user without receiving further
user-interface information from the computer means (2),
said user-interface information including information
about the structure and appearance of the user
interface that is fixed and cannot be varied during
run-time of the printer and the user interface is
operable such that the user may input a command that
triggers the display of a new pane of the user-
interface and the new pane is displayed based on the
user interface information already received and without
further communication with the computer means (2) and
the printer (1) is configured to send a request for
additional information to the computer means (2) in
case that a trigger event occurs using a synchronous
protocol whereby the printer waits for a response from
the computer means (2) including the requested
additional information before responding to the at
least one trigger event (S54) by displaying a pane
based on the user interface information with the
requested additional information received in the
response in a field of the pane."

IX.   Claim 1 of the first auxiliary request differs from
        that of the main request in also setting out the
        connection of the computer means to the printer via a
        network and that, using a user interface displayed on
        the printer, the user can use the print management
        software on the computer means to preview print jobs,
        set print settings, select print media and send jobs
        for printing. Claim 1 of the second auxiliary request
        differs from that of the first auxiliary request in the
        additional feature that the printer is configured to
        send information to the computer means using an

asynchronous protocol in response to at least one other trigger event whereby the printer responds to the at least one other trigger event by updating a displayed pane before a response is received from the computer means.

X.   In addition to an independent apparatus claim 1, each of the main and first and second auxiliary requests also comprises a corresponding independent method claim and an independent claim to a printer. The claims according to the second auxiliary request also comprise claims to a program and to a storage medium.

Reasons for the Decision

1.   Admissibility of the appeal

          In view of the facts set out at points I to III above, the appeal fulfills the admissibility criteria under the EPC and is consequently admissible.

2.   Summary of the invention

2.1   The application relates to providing the user interface (UI) of a printer linked to a computer, for example a print server, running print management software; see paragraph [0019] and figure 2. The UI allows a user to interact with the print management software, for instance to preview print jobs or to select print media. As shown in figure 4, the UI comprises a plurality of tabbed panes (the claims not however being limited to the use of tabs) in the style of a card index, each pane being selected using its tab. The UI can be customised, for instance to include logos or to change button layouts; see paragraph [0002]. The server sends information to the printer defining the structure

and appearance of the UI in a "single initial
download" (see paragraph [0035]), the appearance of the
UI then being fixed during its subsequent "run-time".
This means that, although there is still communication
between the printer and the server, it does not relate
to the structure and appearance of the UI but instead
relates, for example, to populating (i.e. filling) the
fields of a pane of the UI.

2.2   The UI allows the user to input a command that triggers
        the display of a "new" pane, in this context "new"
        meaning that the structure and appearance of the new
        pane are defined in the "initial download". As an
        example of such trigger events, the description gives
        requesting a list of print jobs stored on the server;
        see paragraph [0031]. The request is sent using a
        synchronous protocol, the printer waiting for a
        response from the computer before responding to the
        trigger event by displaying a pane with the requested
        additional information.

3.   Document D5

3.1   D5 is a suitable starting point for assessing inventive
        step using the problem-solution approach. As
        illustrated in figure 1, D5 relates to a multifunction
        peripheral (MFP) device (110) comprising a copier
        device (110a), termed a "hard output unit", connected
        via a SCSI (Small Computer System Interface) interface
        to a control unit (110b), referred to as "essentially a
        print server" in the abstract. As shown in figure 1, a
        file server (120), a workstation (150) and several MFPs
        (110) are coupled to one another via network
        communications lines (160).

3.2   As shown in figure 2, the hard output unit has a non-fixed LCD display (225), input switches (230) and memory (RAM 265, ROM 285) containing user interface (UI) software for displaying information on the display and interpreting user input; see figure 2; 225 and column 3, lines 20 to 25. UI definitions for copying are embedded in the hard output unit, whilst UI definitions for *inter alia* printing are initially stored in the print server and subsequently loaded to the hard output unit (see figure 3; step 365 and column 5, lines 16 to 18), implying that the UI definitions for the device printing functions are fixed during the device run-time.

3.3   According to column 3, lines 35 to 40, the UI definitions can comprise a number of tables, each table relating to a different function requiring a user interface. The tables may include icons, messages, input-fields, rectangles and pictures.

4.   Inventive step, Article 56 EPC

4.1   The appealed decision

       According to the reasons for the decision, the claimed subject-matter lacked inventive step in view of D1.

4.2   The board's preliminary opinion

       The board expressed doubts whether the claimed subject-matter according to the previous requests involved an inventive step not only in view of D1 but also in view of D5.

4.3   The main request

4.3.1   The appellant has argued that the subject-matter of
         claim 1 differs from the disclosure of D5 in three
         features:

         a.   the printer is configured to allow a user to
                 interact with print management software on the
                 computer means;

         b.   the plurality of panes being displayed on the
                 user interface and the triggering of the display
                 of a new pane and

         c.   the trigger event using a synchronous protocol
                 whereby the printer waits for a response from the
                 computer means including requested additional
                 information before responding to the trigger
                 event by displaying a pane with the requested
                 additional information received in the response
                 in a field of the pane.

         According to the appellant, the problem solved by the
         invention with respect to D5 was updating the user
         interface information for local customisations, and
         the updating of an MFP by a workstation known from D5
         hinted at this problem. Moreover the user in D5 did not
         interact with print management software on the control
         unit. Hence it would not have been obvious to modify
         the copier to make requests to the control unit in
         order to receive additional information for display
         within a pane of the printer UI.

4.3.2   The board takes the view that features "a" and "b" set
         out above, are known from D5, so that D5 comes closer

to the claimed subject-matter than conceded by the
appellant.

4.3.3   Regarding feature "a", the appellant argued in the oral
         proceedings that there was no disclosure in D5 of the
         MFP user interface being configured to allow a user to
         interact with management software on the control unit
         to manage print jobs. The board disagrees. D5
         distinguishes between UI definitions which, in the case
         of printing, are loaded from the control unit to the
         short term memory (RAM 265) of the hard output unit
         (see column 3, lines 61 to 64), and management software
         which is stored in the long term memory (disk 280) of
         the control unit for managing *inter alia* print jobs;
         see column 4, lines 14 to 16. According to column 3,
         lines 4 to 10, the hard output unit comprises a "...
         hardware and software interface which allows the hard
         output unit 110a to receive rasterized print jobs from
         the control unit 110b, **manage the print jobs** as well as
         its own copy jobs, and print the print jobs" (emphasis
         by the board). Hence, in the context of D5, the skilled
         person would understand that one of the purposes of the
         MFP UI is to allow the user to interact with the
         management software on the control unit, as set out in
         feature "a" above.

4.3.4   Turning to feature "b", the appellant has argued that
         the passages in D5 relating to the UI definitions for
         printing (see, for instance, column 3, lines 35 to 40)
         do not mention a plurality of panes. The board agrees
         that D5 does not use the term "pane". However the
         skilled person reading the application, for instance
         paragraph [0030] in conjunction with figure 4, would
         understand a "pane" as a "screen" on the UI. In D5 the
         UI definitions comprise "a number of tables, with each
         table relating to a different function needing a user

interface". The board takes the view that a "table" in
D5 qualifies as a screen on the UI and therefore as a
"pane", as set out in feature "b". It is implicit in
the above passage in D5 that, when the user selects a
new function, a new "table", corresponding to a "pane",
is displayed.

4.3.5   Turning to feature "c", the appellant explained in the
         oral proceedings that the expression "synchronous
         protocol" referred to the fact that the printer UI was
         updated in response to information from the computer
         means so that information on the two was
         "synchronized". The board notes that this
         interpretation is supported by paragraph [0031].
         According to the appellant, updating the UI in this way
         improved the responsiveness of the printer. However the
         board regards feature "c" as a usual implementation of
         the disclosure of D5. The UI definitions in D5 include
         the possibility of a table containing an output
         "message"; see column 3, lines 55 to 57. The skilled
         person implementing the UI of D5 to allow the user to
         query the status of the software on the control unit
         for managing print jobs would (see column 4, lines 14
         to 16), as a matter of necessity, make the UI wait for
         the reply from the management software before
         displaying the "message" on the UI, thus arriving at
         feature "c" in an obvious manner.

4.3.6   Hence the subject-matter of claim 1 does not involve an
         inventive step, Article 56 EPC, in view of D5.

4.4   The first auxiliary request

4.4.1   Claim 1 of the first auxiliary request differs from
         that of the main request in also setting out that the
         computer means is connected to the printer via a

network and that, using a user interface displayed on the printer, the user can use the print management software on the computer means to preview print jobs, set print settings, select print media and send jobs for printing.

4.4.2   The appellant has argued that the SCSI connection disclosed by D5 (see figure 2) between the hard copy unit (110a) and control unit (110b) in D5 did not constitute a network, since no other devices were involved. Moreover figure 1 showed that the hard copy unit was not connected to the LAN 160; see column 2, lines 40 to 44. A network connection would allow a single control unit as central print server to work with several printers. Also D5 did not disclose user interaction with the management software on the controller unit.

4.4.3   The board takes the view that the type of connection between the hard copy unit (110a) and the control unit (110b) in D5 is unrelated to the functions of the management software that the user can access via the MFP UI. Hence the contributions to inventive step of these two differences must be considered separately.

4.5   Regarding the limitative effect of the expression in claim 1 "computer means (2) connected to the printer (1) via a **network** (3)" (emphasis by the board), the board finds that the SCSI connection, albeit only between the hard output unit and the control unit, can be considered as a minimal network, since a device can have both roles, namely that of a SCSI initiator and that of a SCSI target (see, for example, https:// en.wikipedia.org/wiki/SCSI_initiator_and_target). Furthermore, the SCSI interface can be used to interconnect more than two devices, although claim 1

does not set out any. Hence this is not a difference feature with respect to D5.

4.6   Turning to the difference feature that, using a UI displayed on the printer, the user can use the print management software on the computer means to preview print jobs, set print settings, select print media and send jobs for printing, the board takes the view, as set out above in connection with the main request, that the skilled person would understand that one of the purposes of the MFP UI is to allow the user to interact with the management software on the control unit. In the board's view, the functions set out in the claim, namely previewing print jobs, setting print settings, selecting print media and sending jobs for printing, do not go beyond the features which the skilled person would provide on a print server as a matter of usual design.

4.6.1   Hence the subject-matter of claim 1 does not involve an inventive step, Article 56 EPC, in view of D5.

4.7   The second auxiliary request

4.7.1   Claim 1 of the second auxiliary request differs from that of the first auxiliary request in the additional feature that the printer is configured to send information to the computer means using an asynchronous protocol in response to at least one other trigger event whereby the printer responds to the at least one other trigger event by updating a displayed pane before a response is received from the computer means.

4.7.2   The appellant argued in the oral proceedings that, because the displayed pane was updated before a response to the trigger event was received from the

computer means, the printer UI was more responsive. The
board notes that, according to paragraph [0032] and
figure 5; steps S58 to S61, the peripheral device may
be configured to send information to the computer means
according to an asynchronous protocol whereby the
peripheral device responds to a trigger event before a
response is received from the computer means. According
to the last sentence of paragraph [0032], "... there is
no need to wait for a reply from the server 2 before
updating the pane displayed by the browser application
because the response may be determined from already
received UI information."

4.7.3   The board takes the view that the additional feature is
         so generally formulated that it covers the displayed
         pane being updated without any technical effect
         occurring that would go beyond the effects usually
         occurring when updating a screen. For instance, the
         displayed pane may be updated with a company logo
         available from already received UI information. As the
         additional feature does not necessarily have a
         technical effect, it cannot contribute to inventive
         step.

4.7.4   Hence the subject-matter of claim 1 does not involve an
         inventive step, Article 56 EPC, in view of D5.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

B. Atienza Vivancos   W. Sekretaruk

Decision electronically authenticated