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**D E C I S I O N**  
**of 15 September 2000**

**Case Number:** T 0030/98 - 3.5.1

**Application Number:** 91120778.5

**Publication Number:** 0532796

**IPC:** H04N 1/00

**Language of the proceedings:** EN

**Title of invention:**

Multifunctional document processing system

**Applicant:**

OKI AMERICA, INC.

**Opponent:**

-

**Headword:**

Multifunctional document processing system/OKI AMERICA

**Relevant legal provisions:**

EPC Art. 52(1), 56

**Keyword:**

"Inventive step (yes)"

**Decisions cited:**

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**Catchword:**

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Case Number: T 0030/98 - 3.5.1

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.1  
of 15 September 2000

**Appellant:** OKI AMERICA, INC.  
3 University Plaza  
Hackensack, NJ 07601 (US)

**Representative:** Betten & Resch  
Reichenbachstrasse 19  
D-80469 München (DE)

**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 31 July 1997  
refusing European patent application  
No. 91 120 778.5 pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** P. K. J. van den Berg  
**Members:** R. Randes  
V. Di Cerbo

## Summary of Facts and Submissions

- I. On 2 October 1997 the appellants (applicants) filed an appeal against the decision of the examining division (dispatched on 31 July 1997) to refuse the present application and paid the appeal fee. The statement of grounds of appeal was received at the EPO on 25 November 1997.
- II. In its decision the examining division found that the subject-matter of claim 1 lacked an inventive step with respect to the disclosure of document D1 (EP-A-0 262 603). The examining division also considered that the subject-matter of the independent method claims 9 to 11 lacked an inventive step and that the subject-matter of all dependent claims (claims 2 to 8) did not include inventive matter.
- III. Following a summons to attend oral proceedings, the appellants filed two sets of claims according to a main and to an auxiliary request (claims 1 to 8), respectively, on 6 September 1999.

Oral proceedings took place on 5 October 1999. In the course of the oral proceedings the appellants filed a new set of claims (claims 1 to 11) as a new main request wherein, in fact, only dependent claim 6 had been amended with respect to the refused set of claims. The appellants thus requested that the decision under appeal be set aside and that a patent be granted on the basis of the **main request** as filed at the oral proceedings or on the basis of claims 1 to 8 filed on 6 September 1999 (**auxiliary request**), and the description (for both requests) as amended in oral proceedings before the Board, page 16 being deleted

(original pages 3, 4, 7 and 15 amended).

- IV. During the oral proceedings the appellants agreed that in principle only the feature that the control module was contained in the host computer distinguished the invention from the prior art according to document D1, which disclosed that the control module was contained in the local peripheral device. Although the system according to D1 could transfer the signals between the host, the peripheral device and the control module in the same way as the system according to the invention, the system according to the invention was more flexible in the sense that it could easily be upgraded. At the priority date the normal design of peripheral devices aimed at making them independent. For example the peripheral device 1 disclosed in D1 had an expensive panel 6 allowing an operator to control different operations (faxing, copying). It appeared, in fact, that a prejudice existed at the priority date against designing a system like the one of the present invention which allows the whole system to be controlled from only the computer.
- V. After deliberation at the end of the oral proceedings **the Chairman announced the following decision:**

1. The debate is closed;
2. The decision is reserved.

- VI. In considering the appellant's requests in more detail, the Board noted that there were some unclear features in the independent claims of the main request which appeared to contradict the description of the present

patent specification. The Board, therefore, thought that it was appropriate to reopen the proceedings by way of a communication. The appellant was thus invited to remove the unclarities in the claims concerned so that a final decision could be taken.

VII. In response to this invitation the appellant filed **amended independent claims 1, 9, 10 and 11 of the main request**, these claims replacing the corresponding claims of the main request, filed in the oral proceedings before the Board, claims 2 to 8 and the description being the same as filed during the oral proceedings.

Claim 1 of the main request reads as follows:

"A document processing system (10) comprising:

a host computer (12) including a control module (22) disposed therein;

a local peripheral device (14) physically separate from but electrically connected to said host computer (12), said local peripheral device (14) including scanning means for optically scanning document information and for converting the scanned document information into first document signals, transmitting means for transmitting the first document signals to the control module (22), receiving means for receiving second document signals from the control module (22), and recording means for producing a record form of document information based on the received second document signals;

the control module (22) being interfaced between the

host computer (12) and the local peripheral device (14), the control module (22) for receiving the first document signals from the local peripheral device (14) and third document signals from a remote device (16) and for sending the received first and third document signals to the host computer (12), the control module also receiving the second document signals and fourth document signals from the host computer (12), for sending the received second document signals to the local peripheral device (14) and for sending the received fourth document signals to the remote device (16), the control module functioning to require that all document signals transmitted from the local peripheral device, including the first document signals, and all document signals transmitted from the remote device, including the third document signals, be transmitted to the host computer, that all document signals transmitted to the local peripheral device including the second document signals be transmitted from the host computer, and that all document signals transmitted to the remote device including the fourth document signals be transmitted from the host computer, the control module (22) further functioning to generate and transmit control signals (26) to the local peripheral device (14),

storing means for storing the first document signals received from said local peripheral device and the third document signals received from said remote device in a memory within said host computer (12);

determining means within the control module (22) for determining a destination for the stored first and third document signals; and

retrieving means for retrieving first and third document signals from the memory and transmitting the retrieved first and third document signals as the second document signals to the local peripheral device (14) or the fourth document signals to the remote device (16), according to the determining means."

Independent claim 9 reads as follows:

"A method for utilizing a document processing system according to claim 1 by utilizing a local peripheral device (14) in conjunction with a physically separate electrically connected host computer (12) having a memory for transmitting a facsimile of a document to a remote device (16), the local peripheral device (14) including scanning means for optically scanning document information, the method comprising the steps of:

placing the document on the scanning means of the local peripheral device;

scanning the document;

converting the scanned document into electrical document signals;

transferring all of the document signals to the memory of said separate host computer (12) utilizing a control module (22) within the host computer (12);

transferring all of the document signals from the memory of the host computer (12) to the control module (22);

determining that a facsimile transmission is to be performed;

transferring all of the document signals from the control module (22) to the facsimile modem;

transmitting all of the document signals from the

facsimile modem to the remote location (16); and printing a copy of the document at the remote location based on the transmitted document signals."

Independent claim 10 reads as follows:

"A method for utilizing a document processing system according to claim 1 by utilizing a local peripheral device (14) in conjunction with a physically separate electrically connected host computer (12) having a memory for receiving a facsimile of a document from a remote device (16), the local peripheral device (14) including printing means for producing a printed document, the method comprising the steps of:

receiving document signals from the remote device (16) over a communication medium at a control module (22) within the host computer (12);  
transferring all of the document signals from the control module (22) to the memory of said separate host computer (12);  
retrieving all of the document signals from the memory of the host computer (12) and transferring all of the document signals to the control module (22);  
determining that the document signals are to be printed;  
transferring all of the document signals from the control module (22) to the local peripheral device (14) destination; and  
producing a printed copy of the document at the local peripheral device (14)."

Independent claim 11 reads as follows:

"A method for utilizing a document processing system



according to claim 1 by utilizing a local peripheral device (14) in conjunction with a physically separate electrically connected host computer (12) for making a copy of a document, the local peripheral device (14) including scanning means for optically scanning the document, and printing means for producing the copy, the method comprising the steps of:

placing the document on the scanning means of the local peripheral device (14);  
scanning the document;  
converting the scanned document into electrical document signals;  
transferring all of the document signals from the local peripheral device (14) to a memory of said separate host computer (12) by utilizing a control module (22) within the host computer (12);  
transferring all of the document signals from the memory of said separate host computer (12) to the control module (22);  
determining that a copying function is to be performed;  
transferring all of the document signals from the control module (22) to the local peripheral device (14) destination; and  
producing the copy of the document."

### **Reasons for the Decision**

1. The appeal is admissible.
  
2. The only issue to be decided is whether the subject-matter of the independent claims involves an inventive step.

*Main Request*

2.1 The Board notes that the appellants agree that, in principle, the only feature distinguishing the subject-matter of claim 1 from the prior art according to D1 is that the control module 22 is positioned in the computer. In the arrangement disclosed in D1 the control module (4, 5, 50 - 55, 66, 67, 69) is clearly separated from the host computer 8 in that it is contained in the housing of the multifunctional image processing device 1, which is connected to the host computer via a cable 7. The Board agrees with the appellants that according to D1 not all of the document signals transmitted between the different devices are transmitted to the host computer, since according to that document there is an OFF-LINE control mode in which the device 1 is operated independently of the host computer 8. Nevertheless, in the arrangement of present claim 1 all units and also the signals between them can be identified in the arrangement of D1.

2.2 The Board agrees that the advantages of the invention can be summarized as already set out in the decision of the examining division:

the MLPD (**m**ultifunctional **l**ocal **p**eripheral **d**evice) only needs a relatively small amount of processing power and memory;

the MLPD can be upgraded by upgrading the processing means and/or memory means in the control module;

the MLPD can be upgraded without disassembling the MLPD;

the control module is shielded by the housing of the host computer; and

signals sent from the host computer to the control module have to travel a smaller distance.

The examining division agreed in its decision that these advantages existed, however, it considered that in the arrangement of D1 it was clear that the control module had to be incorporated to provide the interface between the host, the peripheral device and the facsimile device and expressed the opinion that "the skilled person can easily decide in view of given circumstances whether to upgrade the host computer with the known control module or to upgrade the peripheral device with said module".

The Board does not however share this opinion of the examining division.

Having regard to the advantages of the invention mentioned above, the Board concludes that the objective problem to be posed should be seen in making the known system of D1 more flexible in the sense that it is easy and cheap to upgrade it.

- 2.3 Having regard to this objective problem, it appears to the Board that even if the skilled person could decide in the direction of the invention, he would not do so.

It must be recalled that at the priority date it was normal that a MLPD unit was designed to be used also independently of the personal computer. Document D1 also discloses that the MLPD device is a separate unit. This is not surprising, since a copier and a facsimile

machine were independent units having no need for a computer.

The different components of the MLPD unit according to D1 (multifunctional image processing device 1) are built into a housing. On the front face of the housing there is provided an operating panel 6 for operation of the device. This panel has operating portions for the whole device, for the facsimile function and for the copy function and is quite complicated, having many keys, switches, sliding keys and lamps for the operation. The housing of the device also contains the electronics (hard-ware) corresponding to the control module according to the invention. D1 does not show how the hardware components are made up. However, having regard to the panel with all the mechanical switches, keys and lamps, it appears that a lot of wiring must be present in order to connect all the electronic components inside the casing. Nowhere in the description is there a hint at the use of, for example, plug-in cards (which is an embodiment of the present invention). Thus, it appears that the appellants are right in saying that the normal MLPD devices were impossible or difficult to upgrade, since then the whole mechanical structure and wiring of it had to be taken apart and restructured.

It therefore appears to the Board that it is not immediately obvious from D1 that almost the whole of the electronics of the device 1 should be separated from the MLPD device and put into the computer. Were the skilled person to feel that the MLPD device should be made more flexible in the sense of the objective problem, it appears that this person instead would spontaneously try to restructure the MLPD device

itself. Nothing in the prior art indicates that "a skilled person can easily decide.....whether to upgrade [the control module in] the host computer with the known control module or to upgrade the peripheral device with said module" as has been suggested by the examining division (see under 2.2 above). According to the prior art, there is no such choice. Thus the control module is within the MLDP-housing but cannot in reality be upgraded and in the host computer there is no module at all.

By changing the system according to document D1 into the one identified in present claim 1 a system is arrived at wherein it is easy to upgrade the processing means and/or the memory means within the control module, and the MLPD is in effect likewise upgraded. No disassembly or other physical contact with the interior of the MLPD is necessary. The MLPD may even be made essentially "dumb", i.e. all control functions may be performed by the computer. Since the MLPD according to the invention has a very simple design and only needs small amounts of processing power and memory, it is inexpensive and can be replaced at a relatively moderate price, if such need arises.

Due to the removal of the control module from the MLPD and its location within the host computer a natural shielding is provided by the host computer housing. Moreover, fields originating from the motors and other components in the MLPD are totally avoided.

The examining division expressed the opinion that routing all document signals is a direct result of providing the control module in the host computer. Nevertheless, the Board agrees with the appellants that

this feature of the invention necessarily provides the advantageous effect that all the documents treated in the system could be viewed on the CRT to perform a quality check before further processing.

- 2.4 Hence the Board takes the view that the system according to claim 1 involves an inventive step (Article 56 EPC).

Dependent claims 2 to 8 appended to claim 1 relate to specific embodiments of the invention and are therefore also allowable.

3. Independent claims 9 to 11 all claim uses, i.e. each of them defines a different aspect of "a method for utilizing a document processing system according to claim 1". The Board has come to the conclusion that the system according to claim 1 is inventive. If the system is inventive, however, also the use of it must be inventive. In the present case, the use claims relate to the use of the system when sending a fax (claim 9), when receiving a fax (claim 10) and when copying (claim 11). The Board thinks it is quite appropriate to draft three separate independent claims as the applicants have done in this case. These claims could be seen as alternative claims, each of them identifying one specific use of the system. In fact, it appears that clarity in this case is enhanced by having three relatively short claims instead of having one very long and exhaustive claim covering all the different possible uses. The Board therefore considers the claims to be allowable.

*Auxiliary Request*

4. Since the main Request is allowable, there is no need to consider the auxiliary request.

## **Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to grant a patent on the basis of the appellant's main request.

The Registrar:

The Chairman:

M. Kiehl

P. K. J. van den Berg