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**Datasheet for the decision  
of 12 March 2008**

**Case Number:** T 1147/05 - 3.5.01

**Application Number:** 01122503.4

**Publication Number:** 1207475

**IPC:** G06F 17/60

**Language of the proceedings:** EN

**Title of invention:**

System and method for providing environmental impact information, recording medium recording the information, and computer data signal

**Applicant:**

Ricoh Company, Ltd.

**Opponent:**

-

**Headword:**

Environmental impact information/RICOH

**Relevant legal provisions:**

EPC Art. 52(1)

**Relevant legal provisions (EPC 1973):**

EPC Art. 54(2), 56

**Keyword:**

"Inventive step (no)"

"Referral of a question to the Enlarged Board of Appeal (refused)"

**Decisions cited:**

T 0208/84

**Catchword:**

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Case Number: T 1147/05 - 3.5.01

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.01  
of 12 March 2008

**Appellant:** Ricoh Company, Ltd.  
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Ohta-ku  
Tokyo 143-8555 (JP)

**Representative:** Schwabe - Sandmair - Marx  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 15 April 2005  
refusing European application No. 01122503.4  
pursuant to Article 97(1) EPC 1973.

**Composition of the Board:**

**Chairman:** S. Steinbrener  
**Members:** S. Wibergh  
G. Weiss

## Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division to refuse European patent application No. 01122503.4.
- II. According to the decision appealed, the invention is a non-technical solution to a non-technical problem and merely achieves a business goal. The technical implementation was straightforward, so that the invention did not involve an inventive step.
- III. With the statement of grounds of appeal dated 18 August 2005, the appellant requested that the decision be set aside and a patent be granted based on claims according to a main and two auxiliary requests filed together with the grounds of appeal. Furthermore, it was requested that one or more of three proposed questions a) to c) be referred to the Enlarged Board of Appeal. Question a) read:
- "Does the expression 'state of the art' of Art. 54(1),(2) and Art. 56 EPC only refer to 'state of technology' or does it include any kind of information made available to the public?"
- IV. In a communication, the Board took the view that although claim 1 mentioned a "reduction of the amount of the environmental impact", the claimed system did not bring about such an effect. It would be the consequence of a manager decision. Another reason for not considering any such effects was that no particulars about them had been disclosed, so that the skilled person would not know how to achieve them.

Merely collecting data - any data - was not as such patentable unless use was made of new and inventive means.

V. By letter dated 11 March 2008 the appellant filed new claims according to a main request and four auxiliary requests.

VI. Claim 1 according to the *main request* reads:

"An environmental impact information system, comprising:  
an environmental impact information obtaining unit (25, 27, 29, 31, 33, 35) which obtains environmental impact information regarding an environmental impact at a plurality of processes included in activities of the organization; an environmental impact information collector (39) which collects the environmental impact information of each process obtained by said environmental impact information obtaining unit (25, 27, 29, 31, 33, 35); and an environmental impact information analyzer (39) which analyzes the environmental impact information collected by said environmental impact information collector (39), and obtains a reduction amount of the environmental impact; said system collecting information regarding environmental impacts at activities of an organization, characterized in that  
said environmental impact information obtaining units (25, 27, 29, 31, 33, 35) are connected with each other through a predetermined network, as environmental management devices, for obtaining environmental impact information regarding an environmental impact at the processes, and the environmental impact information analyzer (39) obtains a reduction amount of the

environmental impact as an environmental management device, and  
said environmental impact information system comprises:  
an invested amount registration unit which receives at least an amount of investment and a reduction amount of environmental impact for each of a plurality of investment target processes that are invested at each of the processes for reduction of the amount of the environmental impact, and registers them in a predetermined storage unit;  
a sorting unit which obtains cost-effectiveness of each investment target process registered by said investment amount registration unit and sorts the investment target processes in an order of ascending level of the obtained cost-effectiveness in said storage unit; and  
a determination unit which adds up the reduction amount of environmental impact and the amount of investment in the order of the investment target processes sorted by said sorting unit, and determines the added-up amount of investment as an appropriate amount of investment."

VII. Claim 1 according to *auxiliary request 1* corresponds to claim 1 of the main request but is directed to an "environmental impact information network system". The environmental impact information obtaining unit additionally comprises "terminals with a WWW browser" and the network is "the internet or an intranet".

VIII. *Auxiliary request 2* adds to claim 1 of the main request the feature that the environmental impact information analyzer "obtains a set of environmental impacts in a product's life cycle". It also adds "an environmental accounting system (43) that collects information representing the investment for activities on

environmental conservation and information regarding the effect of the activities and carries out an environmental accounting process based on the collected information".

IX. Claim 1 according to *auxiliary request 3* combines the features of the two preceding requests.

X. Claim 1 of the *fourth auxiliary request* reads:

"An environmental impact information system which collects information regarding environmental impacts at activities of an organization, comprising:

an environmental impact information obtaining unit (25, 27, 29, 31, 33, 35) which obtains environmental impact information regarding an environmental impact at a plurality of processes included in activities of the organization;

an environmental impact information collector (39) which collects the environmental impact information obtained by the environmental impact information obtaining unit (25, 27, 29, 31, 33, 35);

an environmental impact information analyzer (39) which analyzes the environmental impact information collected by said environmental impact information collector (39), and obtains a set of environmental impacts in a product's life cycle; and

an environmental accounting system (43) that collects information representing the investment for activities on environmental conservation and information regarding the effect of the activities, and that carries out an environmental accounting process based on the collected information,

wherein said environmental impact information obtaining unit (27) includes sensors (271) that measure an amount of consumed electricity, an amount of consumed fossil fuel, an amount of consumed water, an amount of consumed chemical materials, an exhaust amount of exhaust gas and an exhaust amount of waste while products are manufactured."

XI. Oral proceedings were held on 12 March 2008. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of one of the sets of claims according to the main request and auxiliary requests 1 to 4, all filed with the letter dated 11 March 2008, and that question a) filed with the letter dated 18 August 2005 be referred to the Enlarged Board of Appeal.

XII. At the end of the oral proceedings the Board announced its decision.

## **Reasons for the Decision**

### *The main request*

#### 1. The invention

The invention relates to an environmental impact information system for providing and recording environmental impact information (about for example pollution), and for collecting information regarding various environmental impacts at an organization so as to contribute to the decision-making (see eg paragraphs [0001] to [0003] and [0174] to [0184] of the A-

publication). To minimize the environmental impacts with high efficiency, it is important to know the environmental impacts at activities of the organization. For example, it is necessary to obtain the environmental impacts in the life cycle of products. The system is a management tool to determine which of a set of proposed investment plans should be made in order to maximize cost-efficiency for a predetermined level of investment and a target reduction amount of environmental impact.

2. Exclusion from patentability

Claim 1 contains a number of "units" and "devices" interconnected by means of a "network". The claim is thus restricted by technical features and therefore defines an invention within the meaning of Article 52(1) EPC.

3. *Inventive step*

3.1 The invention collects and processes "environmental impact information". This can be for example data about power consumption or carbon dioxide emission (cf paragraph [0137]). It also obtains reduction amounts of the environmental impact, which are data about possible improvements in the organization. The output is also information, namely data about the optimal improvements to be implemented for a given level of investment.

3.2 The appellant has argued that the nature of these data ensures that a technical effect is achieved although the invention ultimately merely delivers information on which managers may act.



3.3 The Board accepts that a reduction of the environmental impact may in certain circumstances constitute a technical effect. One example might be an invention concerning a less energy-intensive process for the manufacture of a product. On the other hand, as a further example, if an invention is a proposal to abandon - rather than to improve - an energy-intensive process, there is no technical effect but, at most, a physical consequence. A technical effect should not depend solely on the intervention of the human mind. In the present case the invention is not a proposal for a technically superior process but a way of selecting, from a given set of improved processes, the most cost-effective ones. Whether or not the processes are actually implemented, ie whether there is any effect at all, even physical, is not part of the claim. This will be a later decision to be taken by a manager.

Thus, the potential reductions in environmental impact that the invention serves to determine cannot be regarded as a technical effect.

3.4 The appellant has compared the present invention with the one underlying decision T 208/84 - Computer-related invention/VICOM (OJ EPO 1987,14) and argued that the output in that case - data representing a processed image - was similar to the processed information in the present case. One difference is however that in T 208/84 no human intervention was required to process the image in order to smooth or sharpen its contrast whereas the present invention does require human steps actually to obtain any reduction of the environmental impact. The processing of the information itself

involves no change in a physical entity. It is the *kind* of information processed (environmental impact, invested amount etc) that is essential in the invention, not the representation of the information on a signal level. The invention is thus rather an information processor than a signal processor. For the same reason the appellant's argument that the present invention is similar to (technical) data compressions techniques, such as MPEG, cannot convince.

- 3.5 The appellant finally argues that the relevant skilled person is an environmental engineer qualified to deal with technical as well as non-technical issues. Such issues should therefore not be regarded separately. The Board notes however that any real-world engineer is obliged to deal with non-technical issues in the course of his work, for example business-related tasks, and this mere fact does not render them technical. Processing environmental information may well be the task of an environmental engineer, but it remains processing of information, ie essentially a mental act.
- 3.6 The computer network used for performing the selection is technical but conventional (cf paragraph [0189]). Thus, the claimed environmental impact information system cannot be regarded as solving any technical problem in a non-obvious manner. It follows that the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC 1973).

*Auxiliary request 1*

4. According to this request, the environmental impact information obtaining unit comprises terminals with a

browser, and the network is the Internet or an intranet. The intention underlying the amendment is to reinforce the technical character of the invention, but, as the appellant accepts, it does not contribute to its inventiveness. Thus, this request is also refused (Article 56 EPC 1973).

*Auxiliary request 2*

5. The added "environmental accounting system" is regarded as redundant since its function is already included in the last three features of the claim. The addition that the environmental impacts are in a product's life cycle adds nothing technical since it only defines the content of the data obtained. Thus, this request is also refused (Article 56 EPC 1973).

*Auxiliary request 3*

6. This request being a combination of the two previous ones, it can add nothing inventive (Article 56 EPC 1973).

*Auxiliary request 4*

7. The main additions to claim 1 are the sensors measuring consumed electricity, etc. These sensors however only perform the task they are designed for. The appellant has argued that there is an improvement compared with previous systems in that not historical data but recent information can be obtained. But even if this is correct there is nothing inventive in the idea of a data collection system comprising sensors for obtaining the data. Electricity consumption, for example, can

only be measured by sensors. Connecting such sensors with the claimed system over a network, which is not claimed but has been disclosed, was in the Board's view clearly obvious.

*The referral of a question to the Enlarged Board of Appeal*

8. The appellant has requested that the Enlarged Board of Appeal decide whether the expression "state of the art" in Article 54 (2) EPC 1973 refers to the state of technology or to any kind of information made available to the public. There is however no need to refer this question since the Board bases its decision not on the interpretation of this Article but on the fundamental requirements that an invention should relate to a technical field and solve a technical problem using technical means.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

T. Buschek

S. Steinbrener