Datasheet for the decision
of 3 December 2015

Case Number: T 1903/10 - 3.4.01
Application Number: 97927446.1
Publication Number: 0853291
IPC: G06K19/00, G06K17/00, G06F12/16, G06F11/14
Language of the proceedings: EN

Title of invention:
METHOD AND DEVICE FOR PROCESSING INFORMATION

Applicant:
Sony Corporation

Headword:

Relevant legal provisions:
EPC Art. 123(2)
EPC 1973 Art. 84, 54(1), 54(2), 56

Keyword:
Amendments - added subject-matter (no)
Novelty - (yes)
Inventive step - (yes)

Decisions cited:

Catchword:
Case Number: T 1903/10 - 3.4.01

DECE S I O N

of Technical Board of Appeal 3.4.01

of 3 December 2015

Appellant:  Sony Corporation
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Decision under appeal:  Decision of the Examining Division of the
European Patent Office posted on 3 May 2010
refusing European patent application No.
97927446.1 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman  G. Assi
Members: P. Fontenay
         J. Geschwind
Summary of Facts and Submissions

I. The present decision relates to the appeal which was filed against the decision of the examining division to refuse European patent application No. 97 927 446.1.

The impugned decision was remitted to the post on 3 May 2010.

II. In the "Reasons" for the decision, the examining division held that the subject-matter of the claims 1 to 10 according to the sole request then on file did not involve an inventive step in the sense of Article 56 EPC 1973.

Particular reference was made, in this respect, to document US-4 849 614 (D4).

III. The notice of appeal was filed on 30 June 2010. The appeal fee was paid on the same day. The statement of grounds of appeal was filed on 1 September 2010.

IV. With the statement of grounds of appeal, the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of new claims according to a main request or, in the alternative, according to auxiliary requests I and II.

As a further auxiliary request, the appellant requested, with the notice of appeal, that oral proceedings be appointed.

V. In accordance with the appellant's request, summons to attend oral proceedings were issued.
VI. In a communication of the Board pursuant to Article 15(1) RPBA issued on 24 June 2015, the appellant was informed of the provisional opinion of the Board with regard to the requests then pending.

In particular, the Board observed that the subject-matter of independent claims 1 and 6 according to the main request then on file did not appear to be new in view of document D4. In this respect, the Board questioned the validity of the argument relied upon by the applicant during the examination proceedings, according to which the claimed invention would distinguish from the prior art in that it would permit to divide a memory dynamically in a first area and a second area depending on the applications being uploaded. According to the Board's provisional view, the claimed wording rather appeared to relate to the mere processing of memory means without any dynamic aspect regarding its structure being involved therein.

The Board further expressed the view that the amendments carried out with regard to auxiliary requests I and II then on file would introduce subject-matter extending beyond the original disclosure, contrary to Article 123(2) EPC.

VII. With letter of reply dated 2 November 2015, the appellant filed new sets of claims according to a main request and auxiliary requests I to IV. Further, comments regarding the issues of novelty and inventive step were put forward.

VIII. Oral proceedings before the Board took place on 3 December 2015 in the presence of the appellant's representative.
IX. During the oral proceedings, the appellant withdrew all pending requests and filed a new, single, request.

The appellant's final request was that the decision under appeal be set aside and that a patent be granted with:
- claims 1 to 8 of the new main request filed during the oral proceedings,
- adapted description pages 1 to 3 and 13 to 51 filed during oral proceedings and
- figures 1 to 21 as originally filed.

X. Claim 1 of the appellant's request reads as follows:

"1. An information processing method comprising the steps of:
   receiving (S3) a command from a provider apparatus (1) providing a service;
   processing (S4) the command by utilizing a memory means (66) formed of a plurality of physical blocks of the same size,
   wherein said memory means (66) includes a first area and a second area,
   said first area including at least a provider area definition block storing information relating to a provider area (BN₀..BN₃) consisting of at least a user block in said second area, said at least one user block storing data used by a user,
   said first area further including access right data defining access rights to said at least one provider area (BN₀..BN₃),
   the size of said first area depending on the number of the providers, wherein the number of the providers corresponds to the number of the provider area definition blocks,"
the size of the second area being equal to the difference between the size of the memory means and the size of the first area,

wherein a provider area is allocated to a corresponding provider area definition block,

allocating the physical blocks unused as blocks of the first area to the second area for use as user blocks; and

transmitting (S5) results of the processing step to the provider apparatus (1), wherein the information processing method further comprises, when a new provider is registered, the steps of:

using a physical block as new provider area definition block for the new provider; and

allocating a new provider area to the new provider area definition block."

Independent claim 5 of the appellant's request reads as follows:

"5. An information processing apparatus comprising:

receiving means for receiving a command from a provider apparatus (1) providing a service;

processing means for processing the command by utilizing a memory means (66) formed of a plurality of physical blocks of the same size,

memory means (66) including a first area and a second area,

said first area including at least a provider area definition block storing information relating to a provider area (BN₀..BN₁) consisting of at least a user block in said second area, said at least one user block storing data used by a user,
said first area further including access
right data defining access rights to said at least one
provider area (BN₀..BN₁),
the size of said first area depending on
the number of the providers, wherein the number of the
providers corresponds to the number of the provider
area definition blocks,
the size of the second area being equal to
the difference between the size of the memory means and
the size of the first area,
wherein a provider area is allocated to a
corresponding provider area definition block;
wherein the processing means is configured to
allocate the physical blocks unused as blocks of the
first area to the second area for use as user blocks;
and
transmitting means for transmitting (S5) results of
the processing step to the provider apparatus (1),
wherein the processing means is further configured to
perform, when a new provider is registered, the steps
of:
using a physical block as new provider area
definition block for the new provider;
allocating a new provider area to the new provider
area definition block."

Claims 2 to 4 and 6 to 8 depend, respectively, on
independent claims 1 and 5.

Reasons for the Decision

1. Text applicable

It is noted that the revised version of the Convention
(EPC 2000) does not apply to European patent
applications pending at the time of its entry into force (13 December 2007), unless otherwise provided. In this decision, where Articles or Rules of the former version of the EPC apply, their citation is followed by the indication "1973".

2. **Admissibility**

The appeal meets the requirements of Articles 106 to 108 EPC and Rule 99 EPC. It is thus admissible.

3. **Article 123(2) EPC**

3.1 Claim 1 of the present request derives, primarily, from original claim 1. Similarly, independent claim 5 of the appellant's request is considered to derive, primarily, from original independent claim 3.

Claim 1 has been amended so as to incorporate the steps relating to the reorganisation of the memory means when a new provider is registered. Concretely, claim 1 now recites that the processing method comprises the steps of using a physical block as new provider area definition block and allocating a new provider area to the new provider area definition block. Similar amendments were carried out with regard to the processing means of independent claim 5 which are configured to carry out the corresponding functionalities. A basis for these amendments may be found on page 20, lines 3-15, of the application as filed. Figure 4 and the corresponding section of the description provide additional support for the newly introduced features.

Independent claims 1 and 5 have been further specified to recite that the memory means is "formed of a
plurality of physical blocks of the same size", as recited on page 19, lines 15-21 and page 27, lines 13-30 of the original disclosure, and that "the number of the providers corresponds to the number of the provider area definition blocks" as disclosed on page 22, lines 9-12 and page 27, lines 13-20 of the original disclosure.

The indication according to which the first area includes access rights data defining access rights to the at least one provider area may be found e.g. on page 7, line 10 to page 8, line 3 of the application as filed.

3.2 Figure 7 and the corresponding section of the original description describe in details the organisation of the first memory area. Dependent claims 2 and 3, as to the method, and claims 6 and 7, as to the apparatus, are sufficiently supported by this section of the disclosure.

Operations of the IC card and reader/writer (R/W) unit are disclosed in details on page 30, line 23 to page 32, line 8. Said section of the original application documents constitute a sufficient basis for dependent claims 4 and 8.

3.3 In the Board's judgement, the original disclosure provides a sufficient basis for the generalisation resulting from the absence of any reference to an IC card in the independent claims. It was, in particular, noted that the multiple independent original claims and the introductory section on page 1, lines 5-10 in the application documents as filed did not contain such limitation and that the skilled person would have recognised that the amendments introduced with regard
to original claims 1 and 2 were not related to the type of information processing apparatus and memory means actually considered.

3.4 Consequently, claims 1 to 8 of the appellant's request do not introduce additional subject-matter and thus comply with the requirements of Article 123(2) EPC.

4. Article 84 EPC 1973

The Board is satisfied that the claims are clear and supported by the description as required by Article 84 EPC 1973.

In particular, the independent claims recite all essential features in order to solve the problem addressed by the invention, i.e. to improve the utilization efficiency of the memory means when storing data of a plurality of users/providers (cf. page 2, lines 15-25 of the application as filed). Concretely, the wording of independent claims 1 and 5 specifies that the memory means is formed of a plurality of physical blocks of the same size and that the size of the second area is equal to the difference between the size of the memory means and the size of the first area. Moreover, the claims' wording now implies that this optimised partition of the memory means is maintained when new users/providers are registered.

It follows that the wording of claims 1 and 5 incorporate all essential features according to which the memory means may be dynamically organised according to the recited optimised structure.

5. Articles 54(1),(2) and 56 EPC 1973
5.1 Prior art

The following documents have been considered in the course of the appeal proceedings:
D1: US-A-4 833 595;
D2: US-A-4 797 543;

5.2 Novelty

5.2.1 Document D4 discloses an information processing apparatus and method for receiving a command from a predetermined user, processing this command and transmitting processed results thereof. The IC card of D4 comprises a memory section that includes a system area and a user area for data used by a plurality of users and/or service providers. The user area referred to in D4 comprises a plurality of area definition blocks (index areas) and corresponding provider areas (storage areas) for storing data inherent to each user or provider.

The information processing method of claim 1 differs from the method disclosed in D4, firstly, in that it utilises memory means formed of a plurality of physical blocks of the same size.

The appellant emphasized that according to the method disclosed in D4 the memory areas where preassigned to the various users/providers at the manufacturing stage of the IC card. The Board acknowledges that D4 does not contain any detail as to the process leading to the assignment of the various memory areas. It is thus not in a position to refute the appellant's argument. It
follows that a second difference between the claimed method and the method disclosed in D4 is identified in the steps of using a physical block as new provider area definition block and allocating a new provider area to the new provider area definition block when a new provider is registered.

Similarly, the information processing apparatus of independent claim 5 differs from the apparatus of D4 in that the memory means is formed of a plurality of physical blocks of the same size and in that the processing means are configured to perform the steps of using a physical block as new provider area definition block and allocating a new provider area to the new provider area definition block when a new provider is registered.

For these reasons, the subject-matter of claims 1 and 5 is new over the teaching of document D4.

5.2.2 None of the other available prior art discloses a method or apparatus as defined in claims 1 and 5, respectively.

5.3 Inventive step

Document D4 pertains to the same technical field as the claimed invention and discloses memory means with a structure similar to the structure referred to in independent claims 1 and 5 (cf. section 5.2.1 above). D4 is therefore considered to constitute the closest prior art for deciding on the inventive merits of the claimed invention.

The distinguishing feature according to which the memory means is formed of a plurality of physical
blocks of the same size permits higher flexibility in the management of the various memory areas.

The ability of the claimed information processing method to use a physical block as new provider area definition block for the new provider and to allocate a new provider area to the new provider area definition block when a new provider is registered permits an effective dynamic allocation of the various memory areas, taking advantage of the flexibility offered by the memory blocks being all of the same size. A similar effect is obtained by the processing means of claim 5.

The claimed invention hence solves the objective problem of reduced efficiency in the use of the memory resources according to the prior art.

In D4, the storage area definition information contains inter alia data relating to the number of records contained in the storage area and the record length of said records. This implies that the record length varies between users/providers. There is no indication in D4 to suggest that said record length should be uniform for all storage areas. As a matter of fact, the space occupied by a specific storage area is determined on the basis of both the individual record length and number of records registered in each storage area. It therefore leads away from a memory structure with record lengths with one and the same size, i.e. a size which would be adapted to record the longest records, since such a structure would be clearly detrimental to an efficient use of the memory space.

None of the other documents available suggests the claimed structure for the memory means.
Thus, the subject-matter of claims 1 and 5 involve an inventive step in the sense of Article 56 EPC 1973 since it does not result in an obvious manner from the known prior art.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the examining division with the order to grant a patent in the following version:
   claims 1 to 8 of the new main request filed during the oral proceedings,
   description pages 1 to 3, 13 to 51 filed during the oral proceedings,
   drawing figures 1 to 21 as originally filed.

The Registrar:  

The Chairman:

R. Schumacher  
G. Assi

Decision electronically authenticated