Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen
(D) [X] No distribution

Datasheet for the decision
of 14 October 2009

Case Number: T 1000/08 - 3.5.01

Application Number: 02733362.4

Publication Number: 1394694

IPC: G06F 17/30, G06F 17/60

Language of the proceedings: EN

Title of invention:
Advertisement selection apparatus; advertisement selection
method; and storage medium

Applicant:
Sony Corporation

Opponent:
-

Headword:
Advertisement selection/SONY

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword:
-

Decisions cited:
T 1242/04

Catchword:
-

Case Number: T 1000/08 - 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 14 October 2009

Appellant:	Sony Corporation 7-35, Kitashinagawa 6-chome Shinagawa-ku Tokyo 141-0001 (JP)
Representative:	Horner, David Richard D Young & Co 120 Holborn London EC1N 2DY (GB)
Decision under appeal:	Decision of the Examining Division of the European Patent Office posted 29 November 2007 refusing European patent application No. 02733362.4 pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman:	S. Steinbrener
Members:	S. Wibergh
	P. Schmitz

C2191.D

Summary of Facts and Submissions

I.   This appeal is against the decision of the examining
        division to refuse European patent application
        No. 02733362.4.

II.   Claim 1 in the version of 8 November 2006, on which the
        examining division's decision was based, reads:

        "A content providing system for distributing
        audiovisual content containing advertisement
        information to subscribers having subscriber terminals
        (30), the system comprising:
        a content data base containing the audiovisual content;
        a content server (10) for retrieving content from the
        content data base and sending the retrieved content to
        the subscriber terminals (30);
        an advertisement information data base;
        an advertisement server (20) for retrieving
        advertisement information from the advertisement
        information data base and sending the retrieved
        advertisement information to the content server (10)
        for inclusion in the retrieved content sent to the
        subscriber terminals (30); and
        a selection arrangement (40) for selecting
        advertisement information to be included in the
        retrieved content sent to the subscriber terminals (30);
        characterised in that the selection arrangement (40)
        comprises:
        a subscriber profile data base storing subscriber
        attribute information representing attributes of the
        subscribers;

an advertisement attribute data base storing
advertisement attribute information representing
attributes of the advertisement information;
a content attribute data base storing content attribute
information representing attributes of the content; and
an advertisement selecting server (40) comprising a
rule unit (41) and a mathematical programming unit (42);
said rule unit (41) comprising
first comparing means (Ml) for matching said
advertisement attribute information stored by said
advertisement attribute data base with requirement data
(OPTINOUT) representing content requirements and
producing a first matching result representing the
degree of matching,
second comparing means (M2) for matching said content
attribute information stored by said content attribute
data base with requirement data (OPTINOUT) representing
advertisement information requirements and producing a
second matching result representing the degree of
matching,
third comparing means (M3) for matching said subscriber
attribute information stored by said subscriber profile
data base with said requirement data (OPTINOUT)
representing advertisement information requirements and
producing a third matching result representing the
degree of matching,
fourth comparing means (M4) for matching said
advertisement attribute information stored by said
advertisement attribute data base with requirement data
(OPTINOUT) representing subscriber requirements and
producing a fourth matching result representing the
degree of matching, and
means (AdSelectMPjava) for multiplying said first to
fourth matching results by respective scoring factors

C2191.D

(a-d) and totalling the multiplication results to produce a cost allocation factor for each of candidate pieces of advertisement information for inclusion in retrieved content; and

said mathematical programming unit (42) being operative to assign candidate pieces of advertisement information to retrieved content, based upon said cost allocation factors, in such a manner as to maximise matching of the advertisement information and content".

III.   The examining division held that the invention was a straightforward implementation of a business or administrative procedure for selecting and distributing an appropriate advertisement to a subscriber (cf points 2.1, 2.4 and 2.5 of the decision under appeal).

IV.   The statement setting out the grounds of appeal, dated 25 March 2008, was based on claim 1 as filed with the letter of 8 November 2006. The appellant requested that the decision under appeal be set aside and the application be remitted to the examining division for a search to be performed.

V.   In a communication accompanying a summons to oral proceedings arranged at the appellant's auxiliary request, the Board stated that in accordance with established case law, eg decision T 1242/04 "Provision of product-specific data/MAN", OJ EPO 2007,421, an additional search was not necessarily required if the claimed subject-matter was obvious from notorious technical knowledge. In the present case the Board could not see that matching attribute information with requirement data was more than a mental act or that a weighted summation was more than a mathematical method.

Means for performing these steps were disclosed only on a general level and would in any case seem to be straightforward. Although the invention might involve a "fairly complex correlation of data", as the appellant had pointed out, complexity did not imply technicality. The implementation of the method consisted of well-known apparatus (data bases, servers etc) and functional features (comparing means, means for multiplying) and was thus based on notorious technical knowledge. In such a case it would be inappropriate to carry out an additional search for documented prior art on purely formal grounds. Furthermore, in view of the notoriousness of the implementation features it appeared that the refusal of the patent application was justified for the reasons given in the decision under appeal.

VI.   By letter dated 11 September 2009, the appellant presented further arguments.

VII.   Oral proceedings were held on 14 October 2009. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claim 1 filed with letter dated 8 November 2006.

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

Reasons for the Decision

1.   The invention

The invention is a system for distributing audiovisual
contents, eg movies, containing advertisements by
commercial sponsors to subscribers. After the
subscriber has chosen a movie to watch, a server
selects appropriate advertisements. The selection is
made by adjusting the interests of three parties, viz
the subscriber, the content provider and the commercial
sponsor. Attribute information, characterizing the
subscriber, the movie and the advertisements, is
compared with the corresponding requirements of the
parties. The result of the comparisons determines which
advertisements to insert (see in particular
paragraph [0178] of the published patent application).

2.   The prior art

The hardware of claim 1 consists of connected terminals,
databases and servers. The appellant acknowledges that
these means are notorious. The Board regards this
combination of hardware as the closest prior art, as
did the examining division (decision under appeal,
point 2.2).

3.   Inventive step

3.1   The appellant regards the technical problem as
        "providing a way of selecting data for insertion into
        audiovisual content that takes into account the
        different characteristics of the viewers of the content,
        the information providers and the content providers"

(letter of 11 September 2009, p. 2). For the purpose of
the present decision the Board takes this formulation
to refer implicitly to technical (computer) means for
performing the selection automatically and in real time.
The appellant contrasts this problem with the "business
problem of providing a way of selecting advertisements
for insertion into content, the selection taking into
account the different interests of subscribers,
commercial sponsors and content providers" (*ibid*). From
a comparison of these formulations it appears that the
appellant sees the business aspect primarily in the
fact that the inserted data consists of advertisements.
The examining division, on the other hand, held that
the entire selection procedure was as such non-
technical. The Board therefore has to determine in how
far the selection performed by the system of claim 1
can be regarded as involving technical considerations.

3.2   The purpose of the invention is to select, ie decide
        the contents of, advertisements to be shown to a
        subscriber. This is only possible if the relevant
        information ("attributes") about the subscriber, the
        advertisements and the movies is known. Collecting this
        information is not technical since it could be done
        manually. Organising the data in a suitable way (eg as
        tables) requires logic but no technical skill since it
        could also be done manually. It is moreover noted that
        characterising the data to be inserted requires the
        same kind of descriptive skill whether or not the data
        represents advertisements. Thus, the Board cannot
        accept the appellant's argument that the non-technical
        aspects of the invention would be limited to the kind
        of data processed.

3.3   It is true that technical considerations might be
         necessary in order to convert to a computer-friendly
         form the attribute data of the subscriber, the content
         and the advertisements. But claim 1 merely specifies
         that this data is stored in databases, which is trivial.

         Technical considerations might also be necessary to set
         up a computer to compare data. However, claim 1
         specifies that "comparing means" are provided, which is
         a functional feature. Since functional features leave
         their technical implementation undefined, no farther-
         reaching technical considerations are necessary.

         The final selection of an appropriate advertisement
         requires the comparisons to be combined to yield a
         single value. Claim 1 indicates that a weighted sum is
         calculated ("multiplying said first to fourth matching
         results by respective scoring factors (a-d) and
         totalling the multiplication results"). This
         mathematical rule will influence the selection. However,
         advertisements differ only in their informational
         content, which is as such not technical. The way the
         advertisements are inserted into the content is always
         the same (and not even described), and therefore the
         rule has no technical effect. Again, since the
         calculation is specified as a functional feature it
         requires no technical considerations.

3.4   The Board therefore holds that the (technical)
         implementation of the selection method on the server
         system was obvious. No further technical problem has
         been solved: the idea to select the most suitable
         advertisement is of a commercial nature, collecting the
         appropriate data requires only knowledge about human

interests, formulating selection rules is a matter of
logic, and proposing suitable equations a task for a
mathematician. Skills in logic and mathematics may be
typical for technically skilled persons but are not
limited to them. It appears in fact to the Board that a
business man getting the idea to select advertisements
according to the requirements of commercial sponsors,
content providers and individual subscribers, would
hardly have turned to a programmer for developing this
concept. For example, before actually writing a
computer program it would have been necessary to decide
what kind of attributes should be defined and what
comparisons should be performed. The notional person
skilled in the art of computer programming need not
know anything about audiovisual contents,
advertisements or human nature.

3.5   It is finally noted that the advertisement selection
        could in principle be performed mentally. Although it
        is not rare that the essential part of a technical
        process can be so performed, a technical effect is
        normally only obtained when the process is applied on a
        physical entity, such as a signal. The present
        invention affects the information content of the signal
        but not the way it is represented. The impact of the
        selection (besides any commercial advantage) is
        therefore solely on the subscriber's mind.

3.6   For the reasons indicated the subject-matter of claim 1
        does not involve an inventive step
        (Article 56 EPC 1973).

4.   Additional search

In accordance with established case law (see eg
T 1242/04 *supra*) an additional search is not
necessarily required if the claimed subject-matter is
obvious from notorious technical knowledge. The
appellant has argued that at least the comparison means
and means for multiplying in claim 1 are technical and
non-notorious features which should have been searched
(grounds of appeal, p. 3). The Board cannot agree (cf
point V above). The means in question are part of a
server, and servers were undisputedly notorious at the
relevant date. Furthermore, the means are expressed in
functional form. Functional features only indicate a
purpose. Therefore, since in the present case the
purpose was non-technical, nothing remained to be
searched. It follows that it would have been
inappropriate for the Board to set the decision under
appeal aside and order a search to be carried out.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek   S. Steinbrener

C2191.D