Datasheet for the decision of 3 June 2016

Case Number: T 0917/11 - 3.5.02
Application Number: 01964168.7
Publication Number: 1410338
IPC: G07B17/00
Language of the proceedings: EN

Title of invention:
System and method for verifying digital postal marks

Patent Proprietor:
Pitney Bowes Inc.

Opponent:
Neopost Technologies

Relevant legal provisions:
EPC Art. 56, 114(2)

Keyword:
Inventive step (yes) - mixture of technical and non-technical features
Late submitted material - document admitted by first instance (no) - documents filed in appeal admitted (no)
Decisions cited:
G 0007/93
DECISION
of Technical Board of Appeal 3.5.02
of 3 June 2016

Appellant: NEOPOST TECHNOLOGIES
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Composition of the Board:
Chairman R. Lord
Members: M. Léouffre
W. Ungler
Summary of Facts and Submissions

I. The opponent appealed against the interlocutory decision of the opposition division, dispatched on 15 February 2011, on the amended form in which the European patent No. 1 410 338 could be maintained. The appeal was received on 26 April 2011, and the statement setting out the grounds of appeal was received on 22 June 2011.

II. The opposition division held that the grounds for opposition mentioned in Article 100(a) EPC in combination with Articles 52(2)(c) and 56 EPC did not prejudice the maintenance of the patent as amended according to the second auxiliary request as filed at the oral proceedings of 19 January 2011, in particular having regard to the following documents:
   D1 = CA 2 265 326 A1,
   D2 = US 5 917 925 A,
   D3 = US 5 982 890 A, and

A further document:
   D5 = US 5 790 645 A,
was considered by the opposition division to be late filed and was not admitted into the proceedings.

III. In the statement of grounds of appeal, the appellant described three allegedly known technologies which it referred to as G10, G11 and G12. It also referred to documents D1 to D5, and cited further documents:
   D6 = US 5 402 363 A,
   D7 = EP 1 017 020 A2,
   D8 = US 5 953 427 A, and
   D9 = US 6 064 995 A.
IV. In a further letter dated 1 February 2012, the appellant referred also to document:

G13 = "Das große PC & Internet Lexikon 2005, ISBN 3-8158-2367-6, pages 206 to 207",
to support the allegation that the technology described under G11 was well known.

V. In an annex to the summons to attend oral proceedings dated 23 February 2016, the board expressed its preliminary opinion concerning the admissibility of documents D5 to D9 and prior art G10 to G13 and identified two features distinguishing the subject-matter of claim 1 from the mail processing system disclosed in D1.

VI. In a response dated 29 April 2016 the appellant argued that the distinguishing features were obvious having regard to the combination of D1 with the common general knowledge and in view of documents D5 to D8. The appellant cited also the three following documents:

D10 = DE 37 16 539 A1,
D11 = US 6 454 174 B1, and

VII. Oral proceedings before the board took place on 3 June 2016.

The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked, and further requested that documents D5 to D12 and the generic prior art designated as G10 to G13 be admitted into the proceedings.

The respondent (patent proprietor) requested that the appeal be dismissed, and furthermore, requested that none of the documents D5 to D12 and generic prior art
G10 to G13 be admitted into the proceedings, and that, if any of them were admitted into the proceedings, the case be remitted to the department of first instance and costs be awarded against the appellant.

VIII. Claim 1 of the patent as proposed for maintenance by the opposition division reads as follows:

"A system for verifying a digital mark on a document, the system comprising:
(a) a plurality of document processing machine verification modules (DPMVMs), each responsive to information obtained from sampled documents, and each further responsive to a control file specifying patterns of sampling and specifying responses to sampling results, each DPMVM performing local verification of the sampled documents according to the control file, each DPMVM for providing the information obtained from the sampled documents and the local verification results; and
(b) a data center verification module (DCVM) (11), responsive to the information obtained from the sampled documents and also to the local verification results, for analyzing the information obtained from the sampled documents, for periodically providing a control file in replacement of any existing control file, the replacement control file being based on the results of collectively analyzing the information obtained from the documents."

Claim 10 of the patent as proposed for maintenance by the opposition division reads as follows:

"A method for verifying a mark on a document, the method comprising the steps of:
a) providing from a data center verification module (DCVM) at a central location a control file specifying patterns of sampling documents and specifying responses to sampling results;
b) receiving at a plurality of document processing machine verification modules (DPMVMs) at respective field locations the control file, performing sampling according to the control file to obtain information on the document, and responding to the results of the sampling according to the control file, wherein the sampling includes performing local verification of the mark on the document according to the control file;
c) providing to the DCVM the information obtained from the sampled documents and the local verification results;
d) analyzing at the DCVM the information obtained at each DPMVM from the sampled documents, and periodically providing a control file in replacement of any existing control file, the replacement file being based on the results of collectively analyzing the information obtained from the sampled documents".

Claims 2 to 9 are dependent on claim 1 and claims 11 and 12 on claim 10.

IX. The appellant essentially argued as follows:

The subject-matter of claim 1 was only a system comprising two different types of interconnected modules, both of which could be pieces of software (see paragraph 2.2.2 of the decision under appeal). One module was a data centre verification module, which was responsive to the information from the field verification modules, and which provided a control file to the field modules i.e. the DPMVMs. Thus following
the reasoning of the decision G3/08, the subject-matter of claim 1 was excluded from patentability.

Claim 1 defined merely a system having the potential for communication between the data centre module and the field modules which processed data according to the control file that was sent via the network to configure the field modules. According to section [0010] of the contested patent, the analysis of the information as well as the settings in the control file could be done manually. The settings involved a sampling feature used as a pure data discriminator. D5 (see e.g. figure 5) taught that for discriminating data, sampling was used. D5 should therefore be admitted into the proceedings. The opposition division exercised their discretion in this respect unreasonably, because D5 was not remote from the broad technical field of the claim.

Claim 1 related to a system with a data centre module configuring and receiving information from field modules. D1 did not consider sending a replacement file from a data centre module to field modules. A technical effect of this feature was to render possible the reconfiguring of the field modules. Thus the subject-matter of claim 1 differed from D1 in that
- local verifications were carried out,
- a sampling scheme was specified,
- a control file was produced based on the results of collectively analysing the information from the local verifications.

The content of the control file, namely the sampling scheme controlling feature, did however not have to be considered as a technical feature because it was an administrative measure involving a discriminator which could be set manually by a user.
Claim 1 could be interpreted in such a way that neither automation nor any hardware was involved and that specifying a sample could be done manually. If "sampling" were to be considered, documents D6 to D9 and G10 to G12 should be admitted into the proceedings for the following reasons:
- the abstract and figure of D6 showed that sampling could be varied,
- D7, column 7, lines 20 and 21 showed that a central verification was known,
- D8 (see abstract and figure) and D10, as well as the technologies defined under G10 to G12, dealt with sampling, and
- D9, figure 8, showed modems and batch files to receive and transmit information from/to a data centre. Thus, documents D6 to D9 and prior art G10 to G12 were prima facie relevant.

Even without considering the newly filed documents, the subject-matter of claim 1 did not involve an inventive step. The system of claim 1 comprised modules which could be seen as software modules, while the control file could be considered as being manually produced. Introducing sampling information into the control file was a well known administrative measure, of the type taken for instance in a ticketing procedure at the entrance of a stadium, where the control was reinforced when fraud was detected.

Following this reasoning, claim 1 also lacked an inventive step having regard to the combination of D1 with D4 (page 4, lines 6 to 10), which taught that it was possible to distribute operations within a network between a data centre and field machines.
Claim 10 also did not involve an inventive step for the following reasons. Original claim 10 was considered by the opposition division as non-technical. It had been modified to specify that a control file was provided by a data centre module to data processing mail verification modules, called field modules. It allowed the reconfiguring of the field modules. Starting from D1, the person skilled in the art would have noted the need to automatically and remotely reconfigure the field modules. He would therefore have sent a control file from the data center module to the field modules, as is usual in many security systems, such as ticketing systems, the sampling information remaining a purely administrative instruction following a purely administrative decision to solve an administrative problem. When assessing inventive step, it was however settled case law not to take into account features which did not make a technical contribution, i.e. which did not solve a technical problem.

Furthermore starting with the example of the ticketing system at the entrance of a stadium, where the control at some entrance was reinforced when fraud was detected, i.e. the sampling rate was changed, the person skilled in the art would be confronted with the problem of implementing control at the entrances in an automatic way. He would have implemented the control on a software basis run on hardware as known from D1 without having exercised any inventive skill.

X. The respondent argued essentially as follows:

D1 disclosed an automated system as explained in section 5 of the published patent, which could be implemented according to two different embodiments. In
the first, shown in figure 4, the validity of the mail pieces was checked at the local mail originating apparatus of the mail processing plant, and in the second embodiment, shown in figure 7, the mail originating apparatus solely read the bar code of each mail piece and sent a log file (page 17, lines 8 and 9) comprising the IDtag of each mail piece to a data centre comprising a central database (see figure 11B). The subject-matter of claim 1 did not differ from D1 only in that
- a sample of documents was verified (at the receiving mail processing apparatus 54), and in that
- the log file was a control file specifying patterns of sampling and responses to sampling results, as assumed in the annex to the summons to oral processing.
A further difference arose from the fact that, with respect to the second embodiment, D1 was silent about a local check of the mails deposited at the originating mail processing apparatus. The mail pieces were sorted at the destination apparatus only. The log file did not comprise verification results and the verification results were not sent back to the originating mail processing apparatus. Furthermore, in D1 there was no real time detection check.

Documents D5 to D9 and prior art G10 to G13 should not be admitted into the proceedings since they were late filed and no more relevant than D3, as found (for D5) by the opposition division.
D5 in particular had nothing to do with verifying documents. The opposition division applied the right criteria when exercising its discretionary power not to admit D5 into the proceedings.
Compared to the teachings of D1 and D3, the technical field of D6 was far more remote. D7 to D9 also did not
add anything of relevance beyond the teaching of those documents. Finally D10 related to an analog to digital conversion involving a type of sampling which had nothing in common with the sampling of the present invention. Hence documents D6 to D10 should not be admitted into the proceedings.

The introduction of a new objection of lack of inventive step based on a ticketing system should also not be allowed at this stage of the procedure, since no corresponding argument had been presented during the procedure before the opposition division. No argument based on the ticketing example in connection with hardware had been mentioned. The ticketing example had been used only in connection with the objection of lack of technicality. The appellant also did not show how the teachings of D1 and D4 could be combined. Finally D4 was not discussed in the opposition proceedings and G10 to G12 were not substantiated.

Reasons for the Decision

1. The appeal is admissible.

2. Novelty (Article 54 EPC)
The appellant did not dispute the novelty of the claimed subject-matter.

3. Inventive step (Article 56 EPC)
The board considers D1 as representing the closest prior art. The board understands the relevant disclosure of this document to be as follows.
3.1 The mail system of D1 comprises mail processing plants 51, 53, 55 connected to each other through a delivery transport mechanism 52 (see page 11, lines 1 to 4 and figure 3).
Each processing plant comprises one or more originating mail processing apparatuses 50 and one or more destination mail processing apparatuses 54 (see page 11, lines 6 to 10).
Each of the processing apparatuses 50 and 54 comprises a system for verifying a digital mark on a document (see page 12, lines 21 to 25 in combination with figure 4 for the originating mail processing apparatus and page 16, lines 18 to 22 in combination with figure 8 for the destination processing apparatus).

The board agrees with the respondent that D1 does not explicitly disclose that the originating mail processing apparatus shown in figure 7 in connection with the disclosure of the second embodiment comprises the features of the originating mail processing apparatus of the first embodiment shown in figure 4. However, almost all the features of the apparatus shown in figure 4, such as the deviator control, the deviators 65 and the short paid bin 64A as well as the fraudulent stamps bin 64B are also shown in figure 7. If no local check were to be implemented in the second embodiment of D1 corresponding to figure 7, these deviators and bins would serve no purpose. The board considers therefore that the second embodiment of D1 is a further development of a system based on the originating mail apparatus shown in figure 4.
It follows that the originating mail processing apparatus shown in figure 7 checks in real time (see page 19, lines 29 to 31) the deposited mails and establishes a log file comprising the IDtags of the valid stamps, the other invalid stamps (short paid
mails and stolen mails) being diverted to the said bins (see page 13, lines 16 to 26 and page 14, lines 8 to 14). The log file is therefore a file comprising verifications results, even if comprising only the positive results, namely the Idtags of the forwarded mails.

The board therefore understands that each processing plant 51, 53, 55 is a system comprising at least one originating mail processing apparatus (DPMVM) which reports results of local verifications to a national circulation database 78, and at least one destination processing machine verification module (DPMVM) 54, responsive to information obtained from the documents (see paragraph bridging pages 18 and 19), performing local verification of the documents according to a control file received from a data centre verification module comprising the national circulation database 78 (see page 19, lines 11 to 23).

D1 is silent about the updating of the stolen stamps table 72 at the originating mail processing apparatus (see page 14, lines 8 to 14). Nevertheless, each plant sends a log file comprising the results of the local verification to the national circulation database 78, which is implicitly part of a data centre verification module (DCVM). The DCVM of D1 is responsive to information about the documents obtained from each mail processing plant (cf. page 17, lines 7 to 14). It analyzes the information from the documents, stores in a log file for each stamp a record of the mail pieces (in the format shown in figure 9), which are put in circulation by the originating mail processing apparatus (see page 15, lines 30 and 31 and page 17, lines 7 to 14), and periodically updates the list 88 of information tags sent to the mail processing plants, in
particular to the destination mail processing apparatuses (see page 17, line 31 to page 18, line 25). The list can be seen as an updated log file based on the results of collectively analyzing the information obtained about all documents processed by the originating mail apparatuses. The records in the log file may correspond to either valid or fraudulent mail stamps. The log file is also a control file in the sense that the process implemented at the national circulation database 78 (see figure 11B) may send a message to the destination mail processing apparatus to extract fraudulent mail pieces for sorting to a special stacker bin (see page 17, line 31 to page 18, line 25). The records created at the originating mail processing apparatus and corresponding to mails which are in circulation, are then deleted in national circulation database 78 after a certain time (see page 17, lines 17 to 30).

The board also does not agree with the respondent that the verification results are not sent back to the originating mail processing apparatus. At least in cases where the origin and destination of a mail piece fall in the same geographical area, the control file is sent back to the processing plant where the mail piece was deposited.

3.2 Thus the subject-matter of claim 1 differs from document D1 only in that:
- only a sample of documents is verified (at the originating mail processing apparatus 54), and
- the log file is a control file specifying patterns of sampling and responses to sampling results.
With the term sample the board understands that only a subset of documents and not the whole group of documents is verified, as understood by the opposition division (cf. item 7.6 of the minutes of the oral proceedings before the opposition division and item 5.2.1 of the contested decision).

3.3 It is not apparent to the board what purpose might be served by incorporating information about sampling patterns in the log file of D1, because that log file is used only by the destination mail processing apparatus, and not by the originating mail processing apparatus. Rather than tracking all fraudulent mail pieces, the invention of the patent in suit aims at detecting suspect meters or suspect postal security devices (see published patent sections [0008], [0017] to [0019] and [0021]). In such a context the use of sampling has a technical purpose and cannot be ignored when assessing inventive step. The board therefore considers that the subject-matter of claim 1 is not derivable in an obvious manner from D1 and that it thus involves an inventive step in the sense of Article 56 EPC having regard to D1.

3.4 The appellant has not shown that any of the documents D2 to D4 suggests the features recited under item 3.2 above. Document D4 could be used to show that some control operation done at the data centre verification module and at the originating and receiving mails processing apparatuses could be exchanged. Nevertheless it does not render the two features mentioned under item 3.2 above obvious. A combination of any of the documents D2 to D4 with D1 therefore does not lead to the invention as claimed.
3.5 According to the claimed invention the control file is sent from a data centre verification module to document processing machine verification modules (which are called field modules by the appellant). The control file would have the effect of reconfiguring these field modules. The appellant did not propose any motivation for a person skilled in the art to reconfigure the field modules of D1 in the manner claimed. The argument of the appellant that a person skilled in the art would recognise the need for reconfiguring the mail processing plants of D1, in particular the mail destination mail processing apparatus, appears therefore to be one resulting from an ex-post facto analysis.

3.6 The appellant alleges in a separate line of argument that it would be known in a ticketing system to report the results of the check of the tickets done at the entrances of a stadium to a data centre, which in return would give instructions to modify or reinforce the control at the particular entrances where fraud is noticed. The appellant did not provide any evidence which could support this allegation. Furthermore the appellant did not give any information about the kind of instruction which would be issued by the data centre. Notwithstanding the lack of evidence, it could be accepted that new instructions for ticket checking might be transmitted to an entrance checking point where fraud is detected. However, the distinguishing features mentioned under item 3.2 would not be rendered obvious by any arbitrary type of instruction, and the board does not see any reason why that instruction should be to check only a sample of the tickets. It seems to the board that the aim of a ticketing system is to check all tickets, in the same way that the mail
transporting system of D1 aims at checking every mail piece. Hence starting from a manual ticketing system, a person skilled in the art could be tempted to combine hardware like that used in D1 with software for automating the ticketing process. He would however not have had any incentive to develop software comprising the two features mentioned under item 3.2 above.

3.7 The appellant regards the features relating to the sampling as being irrelevant for the assessment of inventive step, because it considers them as being administrative measures not contributing to any solution of a technical problem. The two features relating to the control file and its sampling instructions do however contribute to the solution of at least one technical problem, namely that of detecting suspect meters or suspect postal security devices (see item 3.3 above). The distinguishing features relating to the sampling cannot therefore be ignored and do involve an inventive step in the sense of Article 56 EPC having regard to D1 or to a ticketing system or a combination of D1 with the knowledge of a person skilled in the art of checking tickets.

3.8 Finally, the appellant alleged that systems for supervising corrupted data in computers or detecting viruses or false money, discussed under the references G10 to G12 in the statement of grounds of appeal, involved a sampling method. The appellant did not provide any proof of this allegation. The board considers it to be doubtful that any of these systems would involve sampling, as opposed to checking 100% of the items. Therefore, as far as sampling is concerned, this alleged prior art is not considered as belonging to the common general knowledge.
Nevertheless, according to the appellant a person skilled in the art would apply the teachings of G10, G11 or G12, in which a central database records incidents (corrupted data or viruses or false money papers), to a system according to D1 to reconfigure the system of D1. The appellant however did not give any reason as to why a need would exist to reconfigure the system of D1 or change the control of the field modules i.e. the modules of the originating mail processing apparatuses of D1. In particular, since the system of D1 tracks each mail piece and records at a central database the valid items which are in circulation, it is unclear which need would be fulfilled by sampling the mail pieces at the originating mail processing apparatuses of the system of D1. The board concludes therefore that the generic prior art as documented in G10 to G12 was no more relevant than the ticketing system and thus could not contribute to establishing the obviousness of the claimed subject-matter.

3.9 Thus, and since for the reasons given below none of the other prior art cited by the respondent (i.e. documents D5 to D12 and G13) was admitted into the proceedings, the board concludes that the subject-matter of the independent claims 1 and 10 of the request as maintained by the opposition division involves an inventive step according to Article 56 EPC.

4. Admittance of late-filed prior art documents
The other documents cited by the appellant (D5 to D12 and G13) were not admitted into the proceedings for the following reasons.

4.1 The opposition division did not admit document D5 into the proceedings because it was filed later than nine
months after the publication of the mention of the grant of the European patent in the European patent bulletin and eight months after the summons to oral proceedings before the opposition division were sent, and because no amendment by the patent proprietor had been made which could have justified such late filing. D5 was also considered to be no more relevant than D3 (see item 5.3.3.3 on page 15 of the contested decision).

The opposition division considered that D3 deals with a method and system for detecting fraudulent data updates in networked computer environments, wherein decentralised stations communicate with central stations to get updates from central stations in order to modify fraud detection (see item 5.3.1 on page 14 of the contested decision).

The appellant did not dispute this analysis of D3 and did not present any argument as to why D5, which relates to screening phone calls, would be more relevant than D3 for assessing whether the features distinguishing the subject-matter of claim 1 from D1 would contribute to an inventive step. The appellant also did not indicate any reason as to why D5 was filed at such a late stage in the procedure.

The board therefore sees no reason to overturn the decision of the opposition division exercising its discretionary power according to Article 114(2) EPC not to admit D5 into the proceedings (cf. Case Law of the Boards of Appeal of the European Patent Office, 7th Edition, 2013, IV.E.3.6 at page 983, and in particular decision G 7/93).

4.2 The appellant did not demonstrate that documents D6 to D12 and G13 were prima facie relevant or could contribute to the assessment of inventive step when starting from D1 and having regard to the
distinguishing features identified under item 3.2 above.

4.2.1 The Board agrees with the respondent that D6, which concerns biological samples, is far from the field of postal security devices.

4.2.2 The Board agrees partly with the appellant's analysis of document D7 (see column 6, line 42 to column 7, line 31 of that document and the penultimate paragraph of page 10 of the statement of grounds of appeal). D7 seems to disclose a system for verifying a digital mark on a document based on sample analysis. However the system according to D7 does not send a control file in the sense of the present claim 1.

4.3 In D8 the verification process at the post office shown in figure 5 is described in the paragraph bridging columns 13 and 14. Only selected mail pieces, i.e. a sample of mail pieces, are checked (see column 14, lines 10 to 17). The subject-matter of claim 1 differs from D8 in that the information obtained from the sampled documents (mail pieces) is sent to a central unit, and that a replacement control file comprising the results of collectively analyzing the information obtained from the documents (mail pieces) is provided by the central unit (see page 13, paragraph 3 of the statement of grounds of appeal and second feature of item 3.2 above). D8 does not therefore appear prima facie more relevant than D1.

4.4 D9 does not concern mail samples and is therefore not more relevant than D1.

4.5 Documents D10 to D12 were filed after oral proceedings were arranged. The board agrees with the respondent
that the field of D10, which relates to analog to
digital converters, is too remote from the mail
delivering systems of D1. Moreover, D11 and D12 were
published after the filing date of the contested
patent.

4.6 G13 was cited to prove that holding a downloadable
update list at a central computer or automatically
downloading a file from a host computer to a client
computer was known. This is however not relevant for
the assessment of inventive step in the context of the
two features mentioned under item 3.2 above.

4.7 The board therefore concluded that documents D6 to D12
and G13 are prima facie not relevant, and hence
exercised its discretion under Article 114(2) EPC not
to admit documents D6 to D12 and G13 into the
proceedings.

5. Since the grounds raised by the appellant do not
prejudice the maintenance of the patent in the form
proposed in the decision under appeal, the request of
the respondent to dismiss the appeal has to be granted.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

B.ter Heijden R. Lord

Decision electronically authenticated