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**Datasheet for the decision  
of 22 August 2017**

**Case Number:** T 1028/14 - 3.5.05

**Application Number:** 07816059.5

**Publication Number:** 2080324

**IPC:** H04L12/54, H04L9/00

**Language of the proceedings:** EN

**Title of invention:**

Reputation-based method and system for determining a likelihood that a message is undesired

**Applicant:**

WatchGuard Technologies, Inc.

**Headword:**

Non-technical features

**Relevant legal provisions:**

EPC 1973 Art. 56, 111(1)  
EPC Art. 52(2), 52(3)

**Keyword:**

Identification of technical and non-technical features  
Remittal to the first instance for further prosecution - (yes)

**Decisions cited:**

T 0641/00, T 1711/13



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Case Number: T 1028/14 - 3.5.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 22 August 2017**

**Appellant:** WatchGuard Technologies, Inc.  
(Applicant) 505 Fifth Avenue South, Suite 500  
Seattle, WA 98014 (US)

**Representative:** Grünecker Patent- und Rechtsanwälte  
PartG mbB  
Leopoldstraße 4  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted on 2 December 2013  
refusing European patent application  
No. 07816059.5 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** K. Bengi-Akyuerek  
G. Weiss

## Summary of Facts and Submissions

- I. The appeal is against the decision of the examining division to refuse the present European patent application on the ground of lack of inventive step (Article 56 EPC 1973) following a request for a decision according to the state of the file.

The reasons for the refusal were set out in the official communication dated 30 August 2013, annexed to a summons to oral proceedings, and included the following in points 2.12 to 2.16:

*"2.12) The following features are not considered to comprise any technical character as they are not part of the functional computer system but rather merely relate to a scheme for processing data:*

*(i) receiving a message at a messaging agent ~~system~~;*

*(ii) forwarding to a reputation agent ~~engine~~ a pre-selected set of identifiers relating to the origin of the message, the pre-selected set of identifiers including an ~~IP~~ address from which the received message originated, a tuple of a domain at which the received message allegedly originated and the ~~IP~~ address from which the received message originated, and a tuple of a user who allegedly originated the message and the ~~IP~~ address from which the received message originated;*

*(iii) checking databases at the reputation engine to determine previously determined reputation metrics for the forwarded identifiers and returning any previously determined reputation metrics to the messaging system;*

*(iv) making a first determination at the messaging system of a likelihood as to whether the received*

*message is undesired using a first set of criteria including the returned reputation metrics; and*

*(v) marking the message as being either desired or undesired in accordance with the first determination.*

*2.13) As none of these features contribute to the solution of a technical problem, they are of no relevance in the assessment of the inventive step according to the problem-solution approach (see Guidelines G-VII 4.3).*

*2.14) Therefore, the only aspect of the claimed method of relevance in the assessment of inventive step is that the previous claim is implemented in networked computer system (considering also the description) and that the message received is an email having a destination IP address in a domain and an origin IP address in a domain.*

*2.15) Such a networked computer system is notorious and as matter of example is known from the abstract of D1. However, the networked computer system according to claim 1 is considered to have been common-place at the priority date of the application (31-10-2006). It merely describes a generic networked computer system performing standard data processing and data producing functions for which such a computer was originally intended to perform. Moreover the data "a pre-selected set of identifiers" are no more than data for identifying the origin and the originator of a message, and they are considered common knowledge: they are no more than IP address. Also the structure of the data has no particular technical meaning, by the way also anticipated by D1 (see abstract).*

*2.16) The skilled person in data processing, when asked to provide a means for performing the data processing tasks according to the particular non-technical scheme set out in claim 1 (see section 2.12) above), would employ a generic common-place general purpose networked computer system upon which to provide the functions as a matter of a routine data processing task without recourse to inventive activity. Therefore, the claim lacks inventive step."*

Furthermore, the following prior-art documents, all cited in the International Search Report (drawn up by the Canadian Intellectual Property Office on 28 December 2007), were referred to in that communication:

- D1:** US-A-2005/0204012;
- D2:** N.J. Croft et al.: "A Model for Spam Prevention in IP Telephony Networks using Anonymous Verifying Authorities", pp. 1-12, April 2005;
- D3:** US-B-6 289 451;
- D4:** E. Harris: "The Next Step in the Spam Control War: Greylisting", Internet citation, pp. 1-11, 21 August 2003;
- D5:** C. Pu et al.: "Towards the Integration of Diverse Spam Filtering Techniques", Proceedings of IEEE Conference on Granular Computing 2006, pp. 17-20; May 2006.

No further documents were cited in the Supplementary European Search Report drawn up by the EPO.

II. With the statement setting out the grounds of appeal, the appellant requested that the decision of the examining division be set aside, stating that "the

claims, the description pages and figures on file are allowable". In addition, oral proceedings were requested if the board did not comply with the above request.

III. **Claim 1** of the present set of claims reads as follows:

"A method of determining a likelihood that a received message is an undesired message, comprising the steps of:

- (i) receiving a message at a messaging system;
- (ii) forwarding to a reputation engine a pre-selected set of identifiers relating to the origin of the message, the pre-selected set of identifiers including an IP address from which the received message originated, a tuple of a domain at which the received message allegedly originated and the IP address from which the received message originated, and a tuple of a user who allegedly originated the message and the IP address from which the received message originated;
- (iii) checking databases at the reputation engine to determine previously determined reputation metrics for the forwarded identifiers and returning any previously determined reputation metrics to the messaging system;
- (iv) making a first determination at the messaging system of a likelihood as to whether the received message is undesired using a first set of criteria including the returned reputation metrics; and

- (v) marking the message as being either desired or undesired in accordance with the first determination."

## **Reasons for the Decision**

- 1. Allowability of the appeal
  - 1.1 *Assessment of inventive step in the appealed decision*
    - 1.1.1 The board understands the statement in point 2.12 of the communication of 30 August 2013 to which the appealed decision makes reference (cf. point I above) to imply that features (i) to (iv) of claim 1, leaving aside the terms "messaging system", "reputation engine" and "IP address", represented *non-technical features* merely relating to "a scheme for processing data". This is confirmed by points 2.13 and 2.14 of that communication, addressing the assessment of inventive step according to the problem-solution approach. The board does not agree with this finding for the reasons set out below.
    - 1.1.2 It is established jurisprudence of the Boards of Appeal that a *non-technical feature* of a claim is a feature relating to non-inventions within the meaning of Article 52(2) EPC and does not contribute to the solution of any technical problem by providing a technical effect, even when interacting with the technical features of the claim; it can thus be ignored for the purposes of assessing inventive step (see e.g. T 641/00, headnote I). This is also reflected in the Guidelines for Examination, G-VII, 5.4, second paragraph in the version of June 2012, rather than in G-VII, 4.3 which does not exist and was therefore



erroneously cited by the examining division in point 2.13 of its communication dated 30 August 2013 (cf. point I above).

- 1.1.3 According to the present application, the problem to be solved by the present invention is to provide "a reputation-based system and method for determining a likelihood that a message is undesired which permits finer granularity in tracking reputations" (see paragraph [0013] of the description as originally filed). Given that the whole application is concerned with telecommunication messages (such as SIP or email messages) and that undesired messages correspond to spam messages, the board is satisfied that the underlying problem to be solved is indeed a *technical* problem. The board also agrees with the appellant that features (i) to (v) of claim 1 do in fact contribute to the solution of that technical problem, for the following reasons:

By feature (i), an apparently technical unit, i.e. a "messaging system", receives a message, which includes identifiers such as IP (Internet Protocol) addresses. Through feature (ii) the messaging system forwards those identifiers to a unit, named "reputation engine". By feature (iii), that unit checks its databases to determine some metrics relating to the "reputation" of the identifiers forwarded and sends them to the messaging system. Through feature (iv), the messaging system calculates the likelihood that the received message is an undesired message (i.e. spam message) based *inter alia* on the metrics delivered by the reputation engine. Lastly, by feature (v), the messaging system marks the message as desired or undesired.

Thus, by the use of those features, a more fine-grain assessment of whether or not a spam message has been received may indeed be achieved. Moreover, contrary to the finding in point 2.12 of the communication dated 30 August 2013, the method steps according to features (i) to (v) are indeed "part of the functional computer system" and do not merely relate to a "scheme for processing data" (which is in any event not mentioned in the list of non-inventions in Article 52(2) (a) to (d) EPC). It is moreover not indicated in that communication why and in which way that scheme served a purely non-technical purpose whatsoever.

1.1.4 In conclusion, contrary to points 2.13 to 2.16 of the communication dated 30 August 2013 (in which only the use of a "networked computer system" and an email including IP addresses was considered to be technical), the board holds that all the features (i) to (v) are *technical* features which consequently are to be considered in full in the assessment of inventive step. Therefore, as to the conclusions set out in points 2.15 and 2.16 of the communication dated 30 August 2013, the question is not whether a notorious networked computer system is able to perform the method steps of features (i) to (v) but whether the skilled person in the field of data processing would come up, without exercising inventive skills, with a solution enabling such a "networked computer system" to perform all those steps.

1.1.5 Hence, the board takes the view that the analysis of inventive step of claim 1 as conducted in the communication dated 30 August 2013 and which led to the refusal of the present application is flawed.

1.2 In view of the above, the present appeal is allowable and, pursuant to Article 111(1) EPC 1973, the board has to decide whether to exercise any power within the competence of the examining division or to remit the case to the examining division for further prosecution.

2. *Remittal of the case for further prosecution*

2.1 The examining division provided only an inadequate and flawed assessment of inventive step, citing only document **D1** as evidence of the notoriety of a "generic networked computer system". In particular, no closest prior art was identified. The board therefore does not consider itself in a position to assess the correctness of the examining division's assessment of novelty and inventive step, or to pass final judgment on that issue for the very first time in these appeal proceedings. Accordingly, the board cannot accede to the appellant's request for allowing the claims at this stage (cf. point II above).

2.2 Rather, the board has decided, in the exercise of its discretion under Article 111(1) EPC 1973, to remit the case to the examination division for further prosecution, having regard to the pertinent prior art - whether cited in the present application as originally filed (i.e. B. Taylor: "Sender Reputation in a Large Webmail Service", July 2006; see paragraph [0011]) or in the examination proceedings (i.e. D1 to D5) or to be identified following an additional search.

3. *Request for oral proceedings*

The decision to remit the case to the department of first instance does not adversely affect the appellant, and can therefore be taken without having to appoint

oral proceedings before the board (see e.g. T 1711/13, reasons 2).

## 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 for further prosecution.

The Registrar:

The Chair:



P. Cremona

A. Ritzka

Decision electronically authenticated