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**Datasheet for the decision
of 14 December 2022**

Case Number: T 0659/20 - 3.5.01

Application Number: 14860317.8

Publication Number: 3066782

IPC: G06Q40/04, H04L9/32

Language of the proceedings: EN

Title of invention:

FAIR CREDIT SCREENED MARKET DATA DISTRIBUTION

Applicant:

Refinitiv US Organization LLC

Headword:

Distribution of market data/REFINITIV

Relevant legal provisions:

EPC Art. 56, 123(2)
RPBA 2020 Art. 13(2)

Keyword:

Inventive step - main request (no)
Request filed after summons - auxiliary request (not admitted)



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Case Number: T 0659/20 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 14 December 2022

Appellant: Refinitiv US Organization LLC
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 27 September
2019 refusing European patent application No.
14860317.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman M. Höhn
Members: L. Falò
L. Basterreix

Summary of Facts and Submissions

- I. This is an appeal against the examining division's decision to refuse European patent application No. 14860317.8.
- II. The application was refused on the ground of lack of inventive step, Article 56 EPC, in view of D1 (US 2003/046539), or D2 (US 2004/260839).
- III. In the statement setting out the grounds of appeal, the appellant requested that the decision of the examining division be set aside and that a patent be granted on the basis of the main or auxiliary request, re-filed and filed, respectively, therewith. The main request corresponded to the one refused in the contested decision.
- IV. In the communication accompanying the summons to oral proceedings, the Board set out its preliminary view that neither the main request nor the auxiliary request involved an inventive step in view of D2 and, therefore, was minded to dismiss the appeal.
- V. In a letter of reply, the appellant filed an amended main and auxiliary request replacing the requests on file, and provided arguments in favour of their patentability. It further requested to be contacted to discuss the written submissions.
- VI. In a communication dated 7 September 2022, the Board informed the appellant that it did not deem a telephone interview to discuss the case with a single member appropriate, as it would go against the principle of collective decision making in the Boards of Appeal.

Furthermore, admissibility of the newly filed requests would be discussed during the oral proceedings. The Board also set out its preliminary view that claim 1 of the main request did not involve an inventive step, and that prima facie claim 1 of the auxiliary request did not appear to comply with the requirements of Article 123(2) EPC.

VII. The appellant informed the Board on 21 September 2022 that it would not be represented at the oral proceedings, which were subsequently cancelled.

VIII. Claim 1 of the main request reads:

"A computer implemented method of distributing credit-screened market data to a plurality of data recipients and providing for the data to be accessible to the plurality of data recipients at substantially the same time to alleviate connection speed differentials between the plurality of data recipients, the method being implemented in a computer system (104) having one or more physical processors (112) programmed with computer program instructions that, when executed by the one or more physical processors, cause the computer system to perform the method, the method comprising:

obtaining, by the computer system, market data;

obtaining, by the computer system, credit data of each of a plurality of data recipients, including at least first credit data of a first data recipient and second credit data of a second data recipient;

generating, by the computer system, first credit-screened market data customized for the first data recipient based on the first credit data and the market

data by a first screener of the computer system, wherein the first screener is a computer executable credit screening process;

generating, by the computer system, second credit-screened market data different from the first credit-screened market data customized for the second data recipient based on the second credit data and the market data by a second screener of the computer system, the second screener separate from and operating in parallel with the first screener, and the second credit-screened market data being different than the first credit-screened market data, wherein the second screener is a computer executable credit screening process;

generating, by the computer system, an encryption key;

encrypting (404), by the computer system, at least a portion of the first credit-screened market data using the encryption key (204);

encrypting, by the computer system, at least a portion of the second credit-screened market data using the encryption key, whereby the encrypted first and second credit-screened market data cannot be accessed by the first and second data recipients upon initial receipt thereof by the first and second data recipients;

transmitting (406), by the computer system, the encrypted first credit-screened market data to the first data recipient over an electronic communication network at a first time;

transmitting, by the computer system, the encrypted second credit-screened market data to the second data

recipient over the electronic communication network at a second time different than the first time;

obtaining, from at least the first or second data recipient, a receipt acknowledging reception of the encrypted first or second credit-screened market data; and

responsive to obtaining, from at least the first and second data recipient, a receipt acknowledging reception of the encrypted respective first and second credit-screened market data, transmitting (410), by the computer system, at a third time different than the first time and the second time and in response to the determination that the encrypted first and second credit-screened market data have been received by the first and second data recipients, the encryption key simultaneously to the first data recipient and the second data recipient,

whereby the encrypted first and second credit-screened market data are decryptable at the third time by the first and second data recipients using the encryption key so that access to the encrypted first and second credit-screened market data is possible for the first and second data recipients at substantially the same time, and wherein the encryption key is transmitted to the first data recipient and the second data recipient utilizing a Multicast transport protocol."

- IX. Claim 1 of the auxiliary request differs from the main request in that the step of obtaining receipts acknowledging the reception of the encrypted first or second credit-screened market data is replaced by the following step:

"determining, by the computer system, that the encrypted first credit-screened market data has been received by the first data recipient via an indication from a first downstream listener that it has detected the transmitted first credit-screened market data and that the encrypted second credit-screened market data has been received by the second data recipient via an indication from a second downstream listener that it has detected the transmitted second credit-screened market data;"

and in that the subsequent step of transmitting the encryption key omits the expression "responsive to obtaining, from at least the first and second data recipient, a receipt acknowledging reception of the encrypted respective first and second credit-screened market data".

X. The appellant's arguments can be summarised as follows:

The invention solved the problem of making data securely and substantially simultaneously accessible by its respective recipients. The prior art did not disclose using the same encryption key for encrypting different content. Since document D2 taught away from using multicast transmission when security was required, the skilled person, starting from D2, would choose a unicast transmission of the encryption key.

Reasons for the Decision

Background

1. The invention concerns the dissemination of market data and market data updates to a plurality of interested market participants. Electronic trading venues have the obligation to ensure fairness, which includes making sure that all recipients receive updates at substantially the same time. Ensuring simultaneous reception can be particularly challenging if the information transmitted is not the same for every participant, since data sets of different sizes will require different transmission times even if the underlying technical infrastructure is identical (see paragraphs [003] to [008]).
2. The invention addresses this problem by distributing to the market participants data encrypted using a generated encryption key (paragraphs [009], [010], [014]). Since the encrypted information cannot be accessed without the key, it is not necessary to ensure simultaneous data delivery. After the participants have acknowledged reception of the encrypted data, the system transmits the encryption key to them via a multicast transport protocol (paragraphs [015] to [018]).

Main request - inventive step

3. Document D2 is considered the most suitable starting point for assessing inventive step. It discloses a server distributing encrypted content to a plurality of users using either unicast or multicast connections. According to one embodiment, the server first distributes the content and then a content key

(corresponding to the encryption key of claim 1) for carrying out decryption (paragraphs [0054], [0113] and [0114]). The content key can be simultaneously distributed to all recipients over a multicast connection at a predetermined distribution time (paragraph [0114], third sentence; paragraph [0015]).

4. Claim 1 differs from the disclosure of D2 by the cognitive content of the information transmitted (user-specific credit data), and in the steps of obtaining the users' credit data, obtaining the market data, and generating the data to be provided.

In the Board's view, these features are part of the underlying business requirements. They do not have a technical character and, therefore, are not relevant for the assessment of inventive step.

5. Claim 1 further differs in that the encryption key is transmitted by the computer system only after it obtains an acknowledgement of reception of the encrypted data from both the first and second recipient. The Board judges that these features cannot support an inventive step, for the following reasons:

- 5.1 According to the appellant, the technical problem solved is *"how to provide means for encrypted data transmitted to each user to be securely and substantially simultaneously accessible by their respective recipients"*.

- 5.2 The Board does not agree with this formulation. When compared with D2, the features of claim 1 do not credibly provide an increase in the security of the data transmission. Hence, the Board is of the opinion that the objective technical problem can be formulated

as how to ensure that the encrypted data are substantially simultaneously accessible by its respective recipients.

- 5.3 It would be clear to the skilled person that a precondition for substantially simultaneous access is that all the users have received the data prior to the distribution of the key. The skilled person would also know that the data reception time will generally differ, depending, for example, on the communication path, the status of the user terminal or the size of the data.
- 5.4 Accordingly, it would be obvious to solve the aforementioned problem by requiring the users to confirm the reception of the encrypted data, and to delay the transmission of the key until all confirmations have been received. Providing acknowledgements of data reception is standard practice in the telecommunication field.
6. The appellant argued that the multicast transmission of the key in D2 had a different purpose, namely reducing the processing load of the server, and that the document actually taught away from using multicast transmission when security was required. The skilled person, starting from D2, would rather choose a unicast transmission, in order to cater for the potentially different transmission delays between server and each recipient.

The Board is not persuaded by these arguments, if only because multicast transmission of the key is explicitly disclosed in D2. Moreover, both in D2 and claim 1 the multicast transmission is used for its normal purpose, that is, to provide the same piece of information

(encryption key) to a plurality of users at substantially the same time. The Board cannot identify, in the context of the invention, any surprising effect arising from the multicasting of the key, particularly in connection with the security of the data transmission.

7. The appellant also argued that the prior art did not disclose using the same encryption key for encrypting different content. The Board observes that document D2 does disclose simultaneous multicasting of the content key (see in particular paragraphs [0015], [0113] and [0114]). This implies that the key is the same for all users. As discussed above, the definition of the cognitive content of the information to be encrypted (i.e. whether it is user-specific or not) is part of the non-technical requirements to be provided to the skilled person and, as such, is not relevant for the assessment of inventive step.
8. The subject matter of claim 1 is therefore not inventive (Article 56 EPC).

Auxiliary request - admissibility

9. The auxiliary request was filed after the notification of the summons to oral proceedings. The appellant provided no reasons justifying the filing of an amendment at such a late stage of the proceedings.
10. Moreover, claim 1 raises *prima facie* further issues under Article 123(2) EPC. In particular, the feature of providing, by a downstream listener, an indication that it has detected the transmitted credit-screened market data does not appear to be directly and unambiguously derivable from the originally filed application.

According to paragraph [056], cited in support by the appellant, the downstream listener provides an indication that it has detected that the credit screened market data has been provided to a market participant. This differs from a direct detection of the transmitted data.

11. In view of the above, the Board decides not to admit the auxiliary request into the proceedings (Article 13(2) RPBA).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek

M. Höhn

Decision electronically authenticated