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Datasheet for the decision of 17 June 2021

Case Number: T 0977/17 - 3.5.01

Application Number: 12783592.4

Publication Number: 2776993

IPC: G06Q20/04

Language of the proceedings: EN

Title of invention:

METHOD FOR PROCESSING AN ELECTRONIC PAYMENT CERTIFICATE

Applicant:

Otto Group Solution Provider (OSP) GmbH

Headword:

Storing electronic receipts/OTTO GROUP SOLUTION PROVIDER

Relevant legal provisions:

EPC Art. 56

Keyword:

Inventive step - predicting future purchases using stored electronic payment receipts (no - business method) - scanning printed payment receipts (no - obvious) - automatically attaching electronic receipt to online resale offer (no business method)

Decisions cited:

T 0641/00, T 0154/04



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Case Number: T 0977/17 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 17 June 2021

Appellant: Otto Group Solution Provider (OSP) GmbH

(Applicant) Freiberger Straße 35 01067 Dresden (DE)

Representative: Eisenführ Speiser

Patentanwälte Rechtsanwälte PartGmbB

Johannes-Brahms-Platz 1 20355 Hamburg (DE)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 10 October 2016

refusing European patent application No. 12783592.4 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman W. Chandler Members: W. Zubrzycki

C. Schmidt

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Summary of Facts and Submissions

- I. This case concerns the applicant's appeal against the decision of the examining division to refuse the European patent application No. 12783592.4 for lack of inventive step (Article 56 EPC).
- II. The examining division held that the subject-matter of claim 1 of the main request did not involve an inventive step over D1 (WO2007/134378) in combination with D4 (US2004/0193538) and D6 (US2005/0189415). The additional features of the auxiliary requests did not add anything of inventive merit, because they related to a straightforward automation of non-technical steps normally performed by human operators.
- III. In the notice of appeal, the appellant requested that the decision be set aside and a patent be granted on the basis of the main or first to third auxiliary request filed therewith. Claim 1 of these requests corresponded to the refused requests. The appellant also requested oral proceedings.
- IV. In the statement setting out the grounds of appeal, the appellant confirmed his requests and provided arguments in favour of inventive step.
- V. In the communication accompanying summons to oral proceedings, the Board expressed its preliminary view that none of the requests met the requirements of Article 56 EPC.
- VI. Oral proceedings were held on 17 June 2021 by videoconference. At the end of the oral proceedings the appellant confirmed the requests submitted with the

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notice of appeal.

VII. Claim 1 of the main request reads:

Method for processing an electronic payment certificate, comprising:

- a) creating an electronic payment certificate (150) in response to a payment for an acquisition
- b) authenticating a user or an entity having executed the payment,
- c) transferring the electronic payment certificate (150) to an account of the user in a database (130) for further processing, and
- d) predicting future acquisitions by a user and/or parameters of future acquisitions by a user based on previous acquisitions by the user and/or parameters of previous acquisitions by the user, wherein a scanning device is adapted to scan a printed payment certificate and extract information from the printed payment certificate for further processing of the information in the database.
- VIII. Claim 1 of the first auxiliary request adds at the end of claim 1 of the main request:

 "and publishing the electronic payment certificate (150)."
- IX. Claim 1 of the second auxiliary request adds at the end of claim 1 of the first auxiliary request:

 "and wherein the publishing is initiated automatically by the database (130)."
- X. Claim 1 of the third auxiliary request adds at the end of claim 1 of the second auxiliary request:
 "comprising the steps of when a user of the database generates an offer for a

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resale on a shopping website or an online auction platform, the database will automatically add the electronic payment certificate or relevant data of the electronic payment certificate to the publicly available offer."

Reasons for the Decision

1. Background

The invention concerns a method for systematic storing and analysing of electronic and printed payment certificates documenting purchases made by a user (see originally filed application, page 1, paragraph 1; page 7, paragraph 2).

Looking at Figure 2, the system implementing the invention includes a central database 140 connected to a computer 110, such as a shop cash register equipped with a bar code scanner (page 10, lines 10 to 28). In a preparatory phase, the database registers the user and creates an account (page 2, lines 23 to 26). After the registration, the user is provided with an identification card comprising a unique bar code 120 (paragraph bridging pages 2 and 3).

When a user makes a purchase, the cash register creates a payment certificate and stores it locally (page 2, lines 14 to 18; page 9, lines 22 to 25). Then, the user is authenticated by scanning the bar code (page 9, lines 26 to 28) and if the authentication is successful, the cash register transmits the stored payment certificate to the central database over the Internet (page 10, lines 4 to 9). The database then stores the received payment certificate in association

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with the user's account (page 2, lines 4 and 5).

In addition to collecting the electronic payment certificates, the invention enables information extracted from printed payment certificates to be input into the database. To this end, the invention uses a scanning device and optical character recognition (OCR) methods (page 7, lines 9 to 18).

The database includes a statistical application analysing data extracted from payment certificates assigned to the user's account (page 5, lines 25 to 32) in order to predict future purchasing behaviour of the user (page 6, lines 26 to 32). This might include for example predicting the probability that the user will want to purchase a certain product or a price he will be willing to pay for it (paragraph bridging pages 6 and 7).

In the embodiment claimed in the auxiliary requests, a certificate is published on the Internet when a user resells a product to which it relates (page 8, lines 7 to 16). More specifically, having created a resale offer on an online auction platform or a shopping website, the user accesses the database and initiates adding the payment certificate to the offer (page 11, lines 3 to 5). The database then communicates with the online auction platform or the shopping website to automatically add the certificate to the offer (page 8, lines 27 to 31; page 11, lines 5 to 8).

- 2. Main request, inventive step
- 2.1 The examining division refused the application for lack of inventive step over the closest prior art D1 which anticipates storing electronic payment receipts of an

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authenticated user in a database in association with his account.

It is common ground that claim 1 differs from D1 by:

- A) Predicting future acquisitions by a user and/or parameters of future acquisitions by a user based on previous acquisitions by the user and/or parameters of previous acquisitions by the user.
- B) A scanning device adapted to scan a printed payment certificate and extract information from the printed payment certificate for further processing of the information in the database.
- 2.2 Concerning feature A, the appellant argued that it solved the objective technical problem of how to select a product to be presented to a user and to adjust the timing and location of the presentation of the product to the user. The examining division formulated a similar problem.

However, the Board considers that this problem formulation is not correct. Firstly, it is not derivable from the claim, which does not mention presenting products to the user. Secondly, even assuming for the sake of argument that the claimed method predicts time and location at which a user is likely to make future purchases, this is in the Board's view not a (further) technical effect counting towards an inventive step. Rather, using statistical methods to predict future purchases based on previous ones is a business research activity excluded per se from patentability under Article 52(2)(c) and (3) EPC (cf. decision T 154/04, points 19 and 20 of the reasons).

Using the COMVIK approach (see decision T 641/00) this

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non-technical functionality cannot contribute to an inventive step and is instead given to the skilled person within the framework of the objective technical problem. Accordingly, the Board considers that the skilled person faces the objective technical problem of implementing feature A in the system of D1.

The implicit computer implementation involves merely routine programming and would have been obvious to the skilled person.

2.3 Turning to feature B, the examining division held that it gave rise to the technical effect of improving database completeness. The appellant also argued along these lines and set out that that printed certificates included historic transactions which were not available in electronic form.

Further, the appellant argued that feature B improved data accuracy which also was a technical effect. More specifically, unlike electronic payment certificates, printed ones reflected in each case a completed transaction and included a correct final price. Furthermore, the printed certificates' content and uniform format were laid down by law and for this reason these certificates had to contain accurate and complete information. Also, the uniform format made them easy to analyse.

2.4 However, the Board considers that none of the purported effects qualifies as a further technical effect counting towards an inventive step.

Firstly, the advantages of increased data accuracy and ease of analysis are not derivable from the original application which does not explain why paper

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certificates are used. The application does not mention the format and content of printed certificates.

Secondly, even assuming that using the printed certificates indeed provided the alleged advantages, the decision to use these certificates would be based on considerations concerning their cognitive business content. These are purely business considerations.

Hence, the Board judges that at the claimed level of detail the requirement to use printed certificates does not involve any technical considerations and constitutes non-technical business matter.

- 2.5 Applying the COMVIK principle, this requirement cannot contribute per se to an inventive step and is instead given to the skilled person within the framework of the objective technical problem. Accordingly, the technically skilled person, being an IT expert, faces the problem of implementing this requirement in D1.
- The examining division considered that using a scanning device to extract data from printed payment certificates would have been obvious over the combination of D1 and D4. The Board agrees and considers that the skilled person facing the above problem would have indeed referred to D4 which relates to extracting payment data from printed receipts. D4 anticipates using a scanning device and OCR techniques for this purpose (see paragraphs [59] and [60]) and the Board judges that the skilled person would have combined this teaching with D1 without an inventive step.
- 2.7 The appellant argued that since D1 taught to avoid paperwork altogether and to use only electronic

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receipts, the skilled person would have disregarded D4 dealing with paper receipts. Moreover, incorporating the teaching of D4 into D1 would have increased the amount of data stored in the database which the skilled person, striving to save storage, would have tried to avoid.

The Board is not persuaded by these arguments. As set out above, the requirement to incorporate into the database payment information from printed payment certificates is part of the technical problem which requires that the skilled person does exactly this. The technically skilled person is constrained by the problem posed and is not in a position to refuse solving it to save memory. In fact, processing business data electronically always increases memory consumption.

2.8 The appellant argued further that features A and B were functionally interdependent and it was not correct to analyse them separately. More specifically, inputting into prediction algorithms more accurate and complete data facilitated these algorithms' operations. As a result, it was possible to use less sophisticated prediction software. This was a synergistic technical effect.

However, the Board considers that the distinguishing features do not interact synergistically. Firstly, the alleged synergistic effect is not derivable from the original application (cf. point 2.4. above). Secondly, the claim covers the case in which electronic payment certificates make up a vast majority of all analysed certificates and the Board cannot see how using few printed certificates (say, one printed certificate versus one million electronic ones) could allow

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simplifying the prediction software. Thirdly, as set out above, predicting future acquisitions is a non-technical business activity. Improving this activity by basing the predictions on more accurate business data does not give rise to a technical effect which could provide a basis for the alleged synergy.

- 3. Third auxiliary request
- 3.1 The Board considers it convenient to discuss the most limited third auxiliary request before the higher-ranking auxiliary requests.
- 3.2 Claim 1 of the third auxiliary request adds to claim 1 of the main request the idea of adding an electronic payment certificate to an offer to resell the product on a shopping website.
- 3.2.1 The examining division held that assisting the resale of an item, having an associated payment certificate, was a non-technical problem. The claimed solution boiled down to automating steps normally performed by humans and was obvious.

The Board goes further than the examining division and judges that not only the problem they formulated but also addressing it by creating a publicly accessible resale offer and attaching to it a payment certificate is business matter.

3.2.2 The appellant contended that the mandatory publication of payment certificates improved the security, because fraud detection algorithms, running at a resale platform, could detect fraudulent offers more easily and be simplified. Accordingly, the objective technical problem was how to facilitate the operations of

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algorithms detecting fraudulent offers at the resale platform.

However, the Board does not consider that this problem formulation is derivable from the claim which does not mention detecting fake offers, let alone automatically. Neither does the original application mention such functionality.

3.2.3 The appellant argued further that adding the payment certificates to resale offers enabled the potential buyer of a resold product to determine whether the resale price was fair compared to the originally paid price and whether the seller was indeed the product's owner. This increased the transparency and users' trust in the system. Moreover, making the payment certificates publicly accessible enabled certificate issuers to detect fake certificates. This kept dishonest users from providing such fake certificates to the system. As a result, the accuracy of data was further improved.

However, the Board is not persuaded by these arguments either. The Board does not dispute that attaching certificates to resale offers increases fairness and transparency of the resale procedure. The Board also accepts for the sake of argument that this solution prevents fraudsters from inputting fake certificates. However, business fairness, accuracy of business data and the users' trust in the system are non-technical parameters and improving them by publishing payment certificates within resale offers is still a purely business decision not involving any technical considerations.

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- 3.2.4 Hence, the requirement to create a public resale offer for a product and to attach to it a corresponding payment certificate is given to the skilled person within the framework of the objective technical problem. Accordingly, the skilled person faces the problem of implementing this requirement in the system of D1.
- 3.2.5 The appellant argued that the users would most likely not be willing to include in resale offers original certificates, which contained sensitive data, and the skilled person had no motivation to make them do it.

However, since the above objective technical problem requires that this be done, no further motivation is necessary.

- 3.2.6 The Board judges that the claimed implementation would have been obvious to the skilled person facing the above problem. The skilled person would have recognised that placing a resale offer on a shopping website would have been an obvious manner of making the offer public. Adapting the administrator computer and the website's code to add the certificate to the offer automatically, upon the user's request, would have been routine for the skilled person.
- 3.2.7 Hence, claim 1 lacks an inventive step.
- 4. First and second auxiliary requests

Since claim 1 of the first and second auxiliary requests are broader than claim 1 of the third auxiliary request, they lack inventive step for the same reasons.

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Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek W. Chandler

Decision electronically authenticated