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### Datasheet for the decision of 7 September 2020

Case Number: T 2314/16 - 3.5.01

Application Number: 11800813.5

Publication Number: 2587446

**IPC:** G06Q50/00, G06Q30/00, G06Q30/02

Language of the proceedings: EN

#### Title of invention:

INFORMATION PROVIDING DEVICE, METHOD OF PROCESSING REWARD PAYMENT, REWARD PAYMENT PROCESSING PROGRAM, AND RECORDING MEDIUM WITH REWARD PAYMENT PROCESSING PROGRAM RECORDED THERON

#### Applicant:

Rakuten, Inc.

#### Headword:

Distributing rewards by assigning users to partial advertisement display areas/RAKUTEN

#### Relevant legal provisions:

EPC Art. 52(2)(c), 56

#### Keyword:

Technical effect - reduced computational load (no - technical, but no embodiment to enable verification)

Inventive step - distributing rewards by assigning users to partial areas of an advertisement banner (yes - involves technical considerations of the web page system)

#### Decisions cited:

T 0641/00, T 0154/04, T 0258/03, T 0792/92, T 1755/10, G 0003/08, T 1463/11

#### Catchword:

The specification of the business method ended with how to determine the reward distribution ratio. The features of dividing the advertisement display area into partial areas and allocating each partial area to a user such that when the partial area is clicked on the user gets a reward, were based on technical considerations of the web page system. It was not motivated by any business considerations.

. . .

In order to come up with this idea, one needs to understand how a web site is built, and in particular how an image map works. Thus, this feature cannot be part of the non-technical requirements. Instead it is part of the solution that has to be evaluated for obviousness. (See point 2.10 of the reasons)



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 2314/16 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 7 September 2020

Appellant: Rakuten, Inc. 1-14-1, Tamagawa (Applicant)

Setagaya-ku

Tokyo 158-0094 (JP)

Representative: Hoffmann Eitle

Patent- und Rechtsanwälte PartmbB

Arabellastraße 30 81925 München (DE)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 6 April 2016

refusing European patent application No. 11800813.5 pursuant to Article 97(2) EPC.

#### Composition of the Board:

Chairman W. Chandler
Members: A. Wahrenberg

P. Schmitz

- 1 - T 2314/16

#### 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. 11800813.5 for lack of inventive step (Article 56 EPC).
- II. The decision referred to the following documents:

D1 : XP002293860 (HTML 4.01 Specification)

D2: XP002404030 (Open Office Specification 1.0)

D3: WO-A-9962033

D4: US-A-2005/0076051

D5 : XP055111551 (HTML, XHTML, and CSS Bible)

- III. The examining division found that the invention defined in the main and two auxiliary requests did not involve an inventive step over the "server side image map" disclosed in any one of D1 to D5, because the distinguishing features constituted an obvious implementation of a set of non-technical requirements.
- IV. 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 refused main request or one of the annexed first to fifth auxiliary requests. The appellant also requested that the Board refer three questions to the Enlarged Board of Appeal if the appeal could not be allowed on the basis of the main request.
- V. In the communication accompanying the summons to oral proceedings, the Board tended to agree with the examining division that the claimed subject-matter

- 2 - T 2314/16

lacked an inventive step. In particular, the Board was not convinced of the technical effect argued by the appellant in support of inventive step.

VI. During the oral proceedings before the Board, which took place by video conference, the appellant filed a new main request replacing all the requests on file.

The appellant's final requests were thus that a patent be granted on the basis of the main request filed during the oral proceedings before the Board.

VII. Claim 1 of the main request reads:

An information providing device which provides display data including an advertisement display area, to a terminal device through a network, the information providing device comprising:

a user information memory means that associates and stores coordinate information of a partial area included in the advertisement display area, and user specifying information for specifying a user, per partial area;

a transmitting means that transmits display data including the advertisement display area, to the terminal device;

a position information acquiring means that acquires a coordinate on a web page specified in the advertisement display area, from the terminal device;

a partial area specifying means that by comparing coordinate information of each partial area with the acquired coordinate, specifies the partial area including the coordinate; and

a reward information memory means that specifies the user based on the partial area specified by the partial area specifying means and the user specifying

- 3 - T 2314/16

information in the user information memory means, and associates and stores information of a reward paid for the specified user.

#### VIII. Claim 3 reads:

A method of processing reward payment executed by a computer which provides display data including an advertisement display area, to a terminal device through a network, the method comprising:

- a step of associating and storing coordinate information of a partial area included in the advertisement display area and user specifying information for specifying a user, per partial area;
- a step of transmitting display data including the advertisement display area, to the terminal device;
- a step of acquiring a coordinate on a web page specified in the advertisement display area, from the terminal device;
- a step of specifying by comparing coordinate information of each partial area with the acquired coordinate, the partial area including the coordinate; and
- a step of specifying the user based on the partial area specified by the step of specifying and the user specifying information, and associating and storing information of a reward paid for the specified user.

- 4 - T 2314/16

#### Reasons for the Decision

- 1. The invention
- 1.1 The invention concerns the distribution of rewards to participants in an affiliate marketing scheme.

Affiliate marketing is an advertising model in which an influencer receives a reward for advertising a product or service, for example by including a link on a blog or endorsing a product on social media.

- 1.2 In the invention, participating influencers (called users in claim 1) are each allocated a portion of an advertisement banner displayed on a web site (Figures 5A and 5B). The user areas are not visible to the visitor of the web site; the visitor just sees an advertising banner. When the visitor clicks on the banner, the user whose portion was clicked on gets a reward. Over time, the rewards will be distributed according to the sizes of the image portions. The idea is to allocate the partial areas such that the reward distribution rates match the degree of contribution of each user to the advertising of the product or service.
- 1.3 Claim 1 is directed to an information providing device which provides display data including an advertisement display area to a terminal device through a network. In plain words, this means a web server which provides a web page with an advertisement banner.

The web server receives a coordinate from the client terminal device, finds the partial area including the coordinate by comparing the received coordinate with stored coordinate information of the partial areas, and - 5 - T 2314/16

specifies the user that is to receive a reward by looking at stored user specifying information that associates a user with each partial area.

#### 2. Inventive step

- 2.1 The examining division assessed inventive step starting from the server-side image map feature in HTML. Server-side image maps allow the web browser to send coordinate information to the web server indicating where the user clicked in an image. The server may use the coordinate information to determine e.g. the content to return.
- 2.2 The examining division found that the claimed invention differed from the server-side image map by (i) the image being an advertisement, and (ii) by the server specifying the user who gets a reward based on the received coordinate information associated with a partial area.

The examining division could not derive any technical problem from the distinguishing features. Those features were rather considered to define business steps implemented on the known web page infrastructure. The examining division argued that the implementation did not go beyond a mere automation of the business-related aspects, and that it would have been obvious to the skilled person. For these reasons, an inventive step was denied.

2.3 The appellant argued that the invention produced a technical effect which went beyond the mere implementation of a business method, namely reducing the processing load for calculating the reward rates. - 6 - T 2314/16

While other methods of allocating rewards required division for calculating the reward distribution rates, each being a fraction of the overall reward, the invention avoided such expensive calculations by specifying the recipient of the reward based on the selection of a partial area. For example, the calculation of the distribution rates for the five users shown in Figure 5B would, in the prior art, have required five divisions, whereas the invention avoided divisions altogether. The effect of reducing the processing load was also mentioned in the application at the end of paragraph [0112], and should be taken into account in the assessment of inventive step.

2.4 The appellant furthermore argued that the examining division had not given reasons why it considered certain features of the invention to be non-technical.

Whether or not a feature had technical character was a crucial point of the inventive step assessment since the non-technical features were allowed to appear in the problem statement. In the appellant's view, neither the EPC, nor the case law, provided any definitions or guidance as to which features should be regarded as technical or not.

2.5 It is common ground that the subject-matter of claim 1 contains a mixture of technical and non-technical features. The information providing device is clearly a technical device whereas the distribution of rewards to influencers is a business idea.

The established approach for dealing with such mixed-type inventions is the "Comvik approach" (T 641/00 - Two identities/COMVIK). In this approach, only the features which contribute to the technical character of

- 7 - T 2314/16

the invention may be taken into account in the assessment of inventive step. Non-technical features which do not make such a contribution are instead treated as being part of the technical problem to be solved, which is often formulated as a set of requirements to implement. Thus, as the appellant argued, a crucial step in this approach is to distinguish between the technical features and the non-technical features.

2.6 The appellant is correct in that there is no positive definition of 'technical' in the EPC.

However, Article 52(2) EPC provides a non-exhaustive list of subject-matter that should *not* be regarded as technical inventions, for example "schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers" (Article 52(2)(c) EPC).

Also, over the years, the case law has provided further guidance on the issue of technicality. In COMVIK, a technical feature was defined as a feature which contributed to the solution of a technical problem by providing a technical effect (reasons, point 6). Thus, features which are prima facie non-technical may interact with the technical subject matter of the claim so as to produce a technical effect (T 154/04 -Estimating sales activity/DUNS LICENSING ASSOCIATES, reasons points 13 and 15). The technical effect must be actually achieved by the feature in question, and it must not be a mere consequence of a modified business scheme (see T 258/03 - Auction method/HITACHI, which held that method steps consisting of modifications to a business scheme and aimed at circumventing a technical problem rather than solving it by technical means could - 8 - T 2314/16

not contribute to the technical character of the subject-matter claimed).

- 2.7 In the field of computer-implemented methods, the technical effect of the invention is often its implementation on technical means. In such cases, it is not always straightforward to determine which features contribute to the implementation, and which features are part of the non-technical requirements to be implemented. Generally speaking, features which are based on technical considerations of the technical system on which the requirements are implemented have technical character and thus may contribute to inventive step (T 792/92 - General purpose management system). However, pure software concepts do not contribute to the technical implementation, because programs for computers are excluded matter under Article 52(2) EPC (T 1755/10 - Software structure/ TRILOGY, reasons point 6, and G 3/08 - Programs for computers, point 13.5).
- In T 1463/11 (Universal merchant platform/
  CardinalCommerce), the Board introduced the concept of
  the notional business person to help separate business
  considerations and technical considerations. The
  business person, who is just as fictional as the
  skilled person in Article 56 EPC, may formulate
  business requirements but will not include any
  technical matter. This approach ensures that, in line
  with the Comvik approach, all the technical matter,
  including known or even notorious matter, can
  contribute to inventive step and is therefore
  considered for obviousness.
- 2.9 Coming back to the technical effect of reducing the processing load, which is indeed a technical effect

- 9 - T 2314/16

that could potentially support the presence of an inventive step, the Board is not persuaded that it is actually achieved. There are two reasons for this.

Firstly, the effect is not derivable based on a comparison between the claimed invention and the starting point in the prior art. In the problem and solution approach, the objective technical problem is formulated based on the difference between the claimed subject-matter and the prior art chosen as the starting point (the closest prior art). In the present case, the starting point is a server-side image map. The effect of reducing the computational load is based on a comparison between the claimed invention and another, hypothetical method of distributing rewards. Since the effect cannot be derived from the difference between the claimed invention and the server-side image map, it cannot form the basis of the technical problem. Thus, in the Board's view, the technical problem vis-à-vis the server-side image map is merely the implementation of the reward calculation.

Secondly, even compared with a method of calculating rewards using division, the invention does not contain enough technical detail to credibly achieve the effect argued by the appellant. For there to be a reduction in processing load, the computational savings of avoiding division must outweigh the complexity introduced by processing image maps. Since the application does not contain any detailed embodiment of the server-side processing of coordinate information, it is not clear that there is a reduction in computation load, let alone a reduction over the whole scope claimed. This shows the importance of including an embodiment in support of the technical effects relied on, because

- 10 - T 2314/16

this might enable them to be verified.

2.10 Having established that the technical problem is the implementation of the reward distribution, the question remains which features are part of the requirement specification and which features are part of the technical implementation.

The appellant argued that the specification of the business method ended with how to determine the reward distribution ratio. The features of dividing the advertisement display area into partial areas and allocating each partial area to a user such that when the partial area is clicked on the user gets a reward, were based on technical considerations of the web page system. It was not motivated by any business considerations.

The Board agrees with the appellant that the allocation of users to partial image areas is not within the domain of the business person. In order to come up with this idea, one needs to understand how a web site is built, and in particular how an image map works. Thus, this feature cannot be part of the non-technical requirements. Instead it is part of the solution that has to be evaluated for obviousness.

2.11 Starting from the HTML server-side image map and given the problem of implementing the business requirement of distributing rewards to a number of users according to certain reward distribution rates, the Board judges that it would not have been obvious to assign users to partial areas of an image as in claim 1. Although the means for implementing this was available in HTML, there was no motivation for the skilled person to do so. Accordingly, the subject-matter of claim 1 involves

- 11 - T 2314/16

an inventive step (Article 56 EPC).

2.12 The subject-matter of claim 3 involves an inventive step for the same reasons.

#### 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 with the order to grant a patent on the basis of the following documents:
  - Claims 1 to 4 filed during the oral proceedings before the Board;
  - Description: pages 3 to 5 (clean version) filed during the oral proceedings before the Board, pages 1, 2, 11 to 57 filed on entry into the regional phase before the EPO;
  - Drawings: sheets 1 to 8 filed on entry into the regional phase before the EPO.

- 12 - T 2314/16

The Registrar:

The Chairman:



T. Buschek W. Chandler

Decision electronically authenticated