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**Datasheet for the decision
of 27 February 2025**

Case Number: T 0725/21 - 3.5.01

Application Number: 14736549.8

Publication Number: 3008612

IPC: G06Q30/02, G06F15/16, G06F17/30

Language of the proceedings: EN

Title of invention:

INCORPORATING USER USAGE OF CONSUMABLE CONTENT INTO
RECOMMENDATIONS

Applicant:

Microsoft Technology Licensing, LLC

Headword:

Eye-tracking/MICROSOFT TECHNOLOGY LICENSING

Relevant legal provisions:

EPC Art. 56, 83, 111(1)
RPBA 2020 Art. 11

Keyword:

Remittal - (yes - technical features not notorious; additional
search required)

Decisions cited:

T 0641/00, T 1515/07, T 0929/18



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Case Number: T 0725/21 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 27 February 2025

Appellant: Microsoft Technology Licensing, LLC
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Representative: Grünecker Patent- und Rechtsanwälte
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 17 December
2020 refusing European patent application No.
14736549.8 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman L. Falò
Members: W. Zubrzycki
E. Mille

Summary of Facts and Submissions

- I. This is an appeal against the decision of the examining division to refuse European patent application No. 14736549.8 for lack of inventive step (Article 56 EPC).
- II. The examining division found that the subject-matter of claim 1 of the main and auxiliary request was obvious over a notoriously known web client device, or alternatively D1 (US 2010/057743 A3). The decision mentioned documents D2 (US 8,150,858 B2) and D3 (US 7,966,325 B2), which, like D1, were cited in the International Search Report.
- III. In the statement setting out the grounds of appeal, the appellant requested that the decision be set aside and a patent be granted on the basis of the refused requests. Furthermore, they provided arguments supporting inventive step and sufficiency of disclosure and requested oral proceedings if the main request was not allowed in writing.
- IV. In a communication pursuant to Rule 100(2) EPC, the Board informed the appellant that it intended to remit the case to the examining division for further prosecution on the basis of the main request and inquired whether their request for oral proceedings was maintained.
- V. By letter of 10 April 2024, the appellant withdrew the request for oral proceedings subject to the Board remitting the case on the basis of the main request.

VI. Claim 1 of the main request reads:

"A computer-implemented method for generating a profile (105) for a user (101) in a recommender system (150) comprising:

detecting that the user (101) has opened a consumable content in an e-reader application (310) on a device (300), the consumable content comprising at least a portion of an electronic book;

determining a set of characteristics for the consumable content;

identifying at least one action performed by the user (101) on the consumable content through the e-reader application (310); and

updating the profile (105) for the user (101) based on the identified at least one action and the set of characteristics;

wherein the device (300) has the ability to track eye movement, and

wherein the identifying at least one action performed by the user (101) comprises recording information related to the movement of an eye of the user when the user (101) is consuming the consumable content".

VII. Claim 1 of the auxiliary request adds the following feature at the end of the claim:

"wherein the identifying at least one action performed by the user (101) further comprises recognizing that the user (101) has left the e-reader application (310), and determining the reason that the (101) has left the e-reader application (310)".

VIII. The appellant argued as follows:

While devices capable of detecting human eye movements

were generally known at the priority date, the claimed use of eye-tracking – namely for detecting user interaction with content displayed on a personal computer or mobile device – was neither known nor obvious. To assess the inventive step of this solution documentary evidence was necessary. The examining division had not provided such evidence despite the appellant's repeated requests.

The technical problem was to implement a method for updating a user profile in a content recommendation system based on user reading patterns. Under the "could-would approach" the question to be answered was whether, when facing this problem, the skilled person would have adapted the notoriously known web-enabled computer or mobile device by adding an eye-tracking capability. This question had to be answered in the negative because none of the cited documents disclosed eye-tracking, and there were more obvious ways of capturing the user's reading patterns.

The features concerning eye-tracking were sufficiently disclosed; the skilled person would have been able to implement them based on the disclosure of the application and their common general knowledge.

Reasons for the Decision

1. The invention
 - 1.1 The invention concerns a method for generating a profile reflecting the user's eye movements when they are reading an electronic book, see paragraphs [23] and [47] of the original application.

1.2 In more detail, once the user has opened a book in an e-reader application running on their computer device ([23]), the method determines the book's characteristics, such as its genre (not claimed), and stores them in the user profile that the computer device holds, see [43]. Although not claimed, the user profile is shared with a recommendation system and used for making purchase recommendations, see [24] and [38].

1.3 The key aspect and focus of the discussion in this appeal are the features stating that, when the user is reading the displayed book, the method tracks information related to their eye movements and records it in the user's profile. Those features' only support in the application is:

"In embodiments where the e-reader has the ability to track eye movement the monitoring application 340 may record various pieces of information related to the movement of the eye, such as tracking that the user is rereading a particular sentence multiple times or is reading the words very fast. The monitoring application 340 stores this information in the record for the content.", see [47].

2. Main request, Articles 56 and 83 EPC

2.1 The examining division considered that the starting point for inventive step (Article 56 EPC) was a web-enabled personal computer or mobile device that ran a web browser corresponding to the e-reader application in claim 1. Such devices were notoriously known at the priority date, and their existence did not need to be proved by written evidence, see decision, points 14 (last paragraph) and 15.

2.2 The examining division further found that, since the application lacked technical detail on how eye-tracking was implemented, these features had to be considered either insufficiently disclosed (Article 83 EPC) or obvious (Article 56 EPC). Specifically, at point 16 of the decision, they argued: *"Therefore, for the sake of sufficiency of disclosure (Article 83 EPC), the principles described must be understood as well-known for the person skilled in the art (Article 56 EPC) for purposes known. He merely reutilises this well-known functionality"*.

2.3 The Board agrees with the examining division's interpretation of the device as a web-enabled personal computer or mobile device, especially considering that paragraph [23] of the published application says the e-reader might be an application running on a personal computer. The Board also agrees that such web-enabled devices were notoriously known at the priority date.

Furthermore, the Board agrees with the examining division's assessment of the claim features that do not concern eye-tracking. More specifically, the Board concurs that, using the COMVIK approach (T 641/00 - *Two identities/COMVIK*), these features are an obvious implementation of a business requirement given to the skilled person to implement for non-technical reasons. Although not clearly stated in the decision, this business requirement dictates that upon determining that the user starts reading a book, this book's characteristics should be recorded in their profile, see decision, points 14 and 17 to 19.

2.4 The crucial features in this appeal, on which the appellant's arguments focus, are those concerning eye-tracking. It is common ground that these features

have technical character, see decision, points 25 and 34.

- 2.5 Concerning sufficiency of disclosure, the Board agrees with the appellant that the requirements of Article 83 EPC are met.

It is true that the application provides little technical detail on eye-tracking and relies in this regard on the skilled person's common general knowledge, see point 1.3 above.

The Board considers however that the skilled person to whom the disclosure on eye-tracking is aimed (see Case Law of the Boards of Appeal, 10th edition, II.C.4.1) is a human-computer interaction expert with experience in hardware integration and sensor interfacing. Given the common ground that eye-tracking sensors were known in general, the skilled person would have been aware of their existence and capable of selecting a suitable one to connect to a computer device running the e-reader application to detect the user's eye movements. Furthermore, in order to store the detected information in the user's profile, the skilled person would have known how to provide the information in a format suitable for computer storage.

- 2.6 Turning to inventive step, the examining division argued that the combination of a computer or mobile device with an eye-tracker was obvious and would have involved merely reusing the well-known functionality, see point 2.2 above. At point 25 of the decision, they added that: "*Indeed, as the applicants rightfully argue, the eye movement sensor may not be given to the person skilled in the art, because this is part of the solution. However, the person skilled in the art is*

confronted with the question: How to capture how a user interacts with the content? This does not refer to any technical solution, but the person skilled in the art would realise, especially in the context of reading electronic books, that the eye is an important attribute in this process. He would therefore have chosen to also capture this type of activity, and would have used the very well-known eye movement sensor as an "of-the-shelf" solution without having to exercise any inventive skills". The examining division did not provide any documentary evidence concerning eye-tracking.

- 2.7 The Board agrees with the appellant (see section VIII) that the claimed combination of a computer or mobile device with an eye-tracker was not notoriously known. Moreover, these features are not part or a direct implementation of the underlying non-technical scheme, but solve the technical problem of automatically detecting user interactions.
- 2.8 Accordingly, claim 1 includes technical features which, in combination, were neither notoriously known nor acknowledged as part of the common general knowledge. Inventive step should therefore be assessed on the basis of pertinent prior art after performing a search, see T 1515/07 - *Cost estimate/SAP*, reasons, point 6.
- 2.9 In the absence of any pointer in the prior art, the examining division's argument that the skilled person would have recognised the crucial role of the eye in book reading and then decided to automatically detect the user's eye movements is considered to involve hindsight. Generally, such speculative reasoning, not based on verifiable facts, cannot replace a proper assessment of pertinent prior art.

2.10 Even though the International Search Report cites several prior art documents (D1 to D3), the Board cannot know whether the claimed combination of features has been searched. As rightly observed by the appellant, none of these documents concerns the use of eye-tracking, which is not surprising, as this report was directed to claims that did not include these features. They were only added to claim 1 upon entering the examination phase.

2.11 In view of the above, the Board judges that performing an additional search is necessary to assess inventive step.

3. Remittal

In the Board's view, the need to perform an additional search is a special reason for remitting under Article 11 RPBA 2020.

Accordingly, the Board remits the case to the examining division for further prosecution including a search (Article 111(1) EPC). The search results must be documented and made accessible in the public file, see e.g. T 0929/18 - *Mobile location data sharing/BLACKBERRY*, point 3.13.

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 based on the main request, including an additional search.

The Registrar:

The Chairman:



T. Buschek

L. Falò

Decision electronically authenticated