Internal distribution code:

(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [X] To Chairmen
(D) [-] No distribution

Datasheet for the decision of 6 May 2014

Case Number: T 1259/08 - 3.5.01

Application Number: 98957085.8

Publication Number: 981795

IPC: G06F17/00

Language of the proceedings: EN

Title of invention:
DIVERSION AGENT USES CINEMATOGRAPHIC TECHNIQUES TO MASK LATENCY

Applicant:
Pendragon Wireless LLC

Headword:
Diversion agent/PENDRAGON WIRELESS

Relevant legal provisions:
EPC Art. 52(1), 54

Keyword:
Novelty - diverting a user's attention from a delay (no - subjective feature)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1259/08 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 6 May 2014

Appellant: (Applicant)	Pendragon Wireless LLC 2300 Carillion Point Kirkland, WA 98033 (US)
Representative:	Talbot-Ponsonby, Clare Josephine Coller IP Management Fugro House Hithercroft Road Wallingford Oxfordshire OX10 9RB (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 15 February 2008 refusing European patent application No. 98957085.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: S. Wibergh
Members: W. Chandler
P. Schmitz

Summary of Facts and Submissions

I. This is an appeal against the decision of the Examining Division to refuse the European patent application No. 98957085.8. The application concerns the masking of network delay in a networked, user-interactive software application.

II. The Examining Division refused the application according to the state of the file essentially because the idea of masking the delay using a cinematographic technique was not new in view of Capps M. and Stotts D.: "Research Issues in Developing Networked Virtual Realities: Working Group Report on Distributed System Aspects of Sharing a Virtual Reality", Sixth IEEE Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises, Cambridge, MA, USA, 18-20 June 1997, pages 205-211 (D6).

III. In the statement setting out the grounds of appeal, dated 4 June 2008, the appellant argued that the invention differed from D6 in that it diverted the user from the delay and amended the claims accordingly. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the amended claims. Oral proceedings were requested on a conditional basis.

IV. In the communication accompanying the summons to oral proceedings, the Board expressed doubts whether, even with the new amendments, claim 1 was novel over D6. Furthermore, the Board considered that, even if the feature of distracting a user with a cinematographic effect were considered to be a difference, this appeared to be a matter of human perception and therefore subjective and not technical. In a reply, the

appellant informed the Board that it would not be attending the oral proceedings.

V. At the oral proceedings, which took place in the appellant's absence, the Board considered and decided on the sole request filed with the grounds of appeal.

VI. Claim 1 reads as follows:

"A software agent (114, 116, 118) for local use at a user in a user-interactive software application (112) for running in a distributed system (100) with multiple data processing machines (102, 104, 106) connected via a data network (110), the software agent (114, 116, 118) comprising

an input (203) for receiving information about a delay in the network (110), and

an effector (224) for locally at the user masking the delay by selectively creating an effect dependent on the delay,

the effector being arranged for creating the effect and diverting the user from parts of the application (112) affected by the delay using a cinematographic technique to manipulate an image displayed to the user, sounds supplied to the user or tactile feedback to the user."

Reasons for the Decision

1. The invention

1.1 The invention concerns a networked, user-interactive software application, such as a virtual environment or a multiplayer video game (page 1, lines 2 to 4 of the published application). Such software applications are

generally sensitive to delay caused by network latency. In a networked video game, where multiple users are interacting in real time, the network delay may spoil the interactivity of the game (page 1, lines 8 to 12).

1.2 The software agent of the invention seeks to mask the delay by creating a distracting effect that diverts the user from the parts of the application affected by the delay (page 2, lines 3 to 6, 13 and 14). The effect is created using a "cinematographic technique" to manipulate an image displayed to the user, sounds supplied to the user, or tactile feedback to the user (page 2, lines 10 to 14). The cinematographic technique may be, for example: zooming in or zooming out; a dummy object blocking the view; an "interlude"; or switching to another scene (page 2, lines 17 to 24).

1.3 Figure 3 shows an example of a networked video game according to the invention, involving two avatars engaged in hand-to-hand combat. Each avatar is controlled by respective users at networked machines (Figure 1: 102 and 104). When either machine detects an unacceptable network delay, it switches to a close-up (zoomed in) representation of the avatars showing their facial expressions but not the blows that are affected by the delay (page 6, lines 21 to 31). This results in the claimed effect of "diverting the user from parts of the application affected by the delay".

2. The prior art

2.1 D6 discloses a user-interactive software application for use in a distributed system with multiple data processing machines connected via a data network (section 1. Introduction), e.g. a networked, shared virtual environment ("VE"), or a multi-user, Internet-

based action game ("Quake"). The 3D graphics of the virtual world ("the world") are rendered at the local client (section 1, right column, lines 7 to 11). This corresponds to the "software agent" in claim 1. D6 also discloses "ameliorating" the effects of network delay (section 3.2.2). To this end, the client software uses knowledge of network delay to manipulate the 3D image by modifying the rendering of objects (section 3.2.2, second paragraph). The image manipulation is called "temporal warping" (*ibid*). For instance, if a user A throws a ball to user B, temporal warping may be used to modify the velocity of the ball to compensate for network delay. It was not disputed that this constituted masking the delay by creating an effect dependent on it and that the effect used a cinematographic technique to manipulate an image, as claimed.

3. Novelty - claim 1

3.1 The appellant argued that in the invention the delay and the adverse effects were accepted as they were and the cinematographic technique was used to *divert* the user from these adverse effects. In contrast, the aim of the temporal warping in D6 was to compensate for the delay such that the end of the ball's trajectory was reached without delay. Thus, the temporal warping in D6 was not "diverting the user from parts of the application affected by the delay".

3.2 However, in the Board's view, whether or not a cinematographic technique has the effect of diverting the user from parts of the application affected by the delay is a matter of human perception. The effect will depend on the user's visual system and state of mind, and is, therefore, also subjective. For example, the

warping of the ball in D6 might serve to distract some users from other parts of the application, such as the throwing and catching at each end of the event. Other users might not be so distracted and might still notice the delay in all parts of the application. In the Board's view, such a difference cannot have a limiting effect on the claim.

3.3 Accordingly, claim 1 is not novel (Article 54(1) and (2) EPC).

4. Inventive step - claim 1

4.1 Even if the feature of diverting the user from parts of the application affected by the delay had been considered to distinguish the invention, the Board judges that it would not have involved an inventive step.

4.2 It is established jurisprudence of the boards of appeal that an allowable invention must be a technical solution to a technical problem. The appellant stated that the technical problem was how to deal with network delay. The technical solution was to divert the user with the effect. However, since as discussed above, this solution is a matter of human perception, it follows that it would be non-technical. Furthermore, it also follows that it would be unpredictable whether such a subjective feature would actually solve the technical problem. In this respect, the invention is somewhat analogous to showing a video clip to somebody waiting for a lift to arrive, which is also using a cinematographic technique to deal with a delay. Thus, there would be no technical solution to the problem.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek S. Wibergh

Decision electronically authenticated