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Datasheet for the decision of 21 February 2014

Case Number: T 0929/10 - 3.2.04

Application Number: 04730378.9

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Language of the proceedings: EN

Title of invention:
COMPUTER SIMULATION CONTROL SYSTEM

Patent Proprietor:
Smit, Fernando

Opponent:
Poole and Berry Limited

Headword:

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
Novelty - main request (yes) - auxiliary request (yes)
Inventive step - main request (no) - auxiliary request (yes)

Decisions cited:

Catchword:

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Case Number: T 0929/10 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 21 February 2014

Appellant: (Patent Proprietor)	Smit, Fernando Roerstraat 5 7005 BS Doetinchem (NL)
Representative:	Jansen, Cornelis Marinus V.O. Johan de Wittlaan 7 2517 JR Den Haag (NL)
Respondent: (Opponent)	Poole and Berry Limited Greengates, Upper Northam Drive Hedge End, Southampton SO30 4BG (GB)
Representative:	Targett, Kenneth Stanley 48 Meadowsweet Way Horton Heath, Hampshire SO50 7PD (GB)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 2 March 2010 revoking European patent No. 1750820 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman: E. Frank
Members: J. Wright
T. Bokor

Summary of Facts and Submissions

I. On 27 April 2010 the appellant (proprietor) lodged an appeal, against the decision of the opposition division posted on 2 March 2010 to revoke European patent No. 1750820, and simultaneously paid the appeal fee. The statement setting out the grounds was received on 8 July 2010.

II. Opposition was filed against the patent as a whole and based on Article 100(a) EPC in combination with Articles 52, 54 and 56 EPC for lack of novelty and inventive step.

The opposition division held that the patent as amended according to all requests did not meet the requirements of the EPC, in particular for lack of novelty or lack of inventive step. In its decision the division considered the following prior art, amongst others:

E1/E2: JP-11-179051A/its English language translation
E3: GB2329829A
E4: FR2787308 A1
E5: US2002/0032553
The racing kart simulator rig known as "gamechopper", as supported by the documents:
E10: Flyer
E11: Amazon customer review
E12: Looki.de screenshots
E13: "Mercedes Benz", (extract of Manual for the Mercedes Benz A-Class car, 24-01-2001)

III. The appellant (proprietor) requests that the decision under appeal be set aside and the patent be maintained in amended form according to the main request or alternatively, according to one of the first to eighth

auxiliary requests. The claims according to the main request and first to fifth and eighth auxiliary requests were filed with the grounds of appeal. Claims according to the sixth and seventh auxiliary requests, together with a description for each request, were filed on 13 December 2013.

The respondent (opponent) does not submit any requests.

IV. With a communication of 14 November 2013 the parties were summoned to attend oral proceedings on 21 February 2014. In a letter received 13 December 2013, the appellant informed the Board that he would not attend the scheduled oral proceedings. The respondent did not reply to the summons.

V. Oral proceedings were duly held in the absence of the parties on 21 February 2014.

VI. The independent claims of the main request read as follows:

"1. Computer simulation control system, comprising:
- at least one control module (1, 2) for controlling a computer simulator program;
- a seat comprising a seat part (3) and a back support (4);
-at least one mechanism (5) for coupling the seat and the at least one control module (1, 2) to each other in such a way, that a user can be seated on the seat part (3) of the seat for handling the at least one control module (1, 2) therefrom;
wherein the back support (4) of the seat is movable between a first position, in which first position the back support (4) extends at an operating angle (α)

upwardly from said seat part (3) for supporting at least part of the back of a user, and a second position, in which second position the back support (4) does not extend at said operating angle (α) upwardly from the seat part (3), wherein said back support (4) extends substantially opposite the seat part (3) when the back support (4) is in the second position, wherein said seat part comprises a seat frame (6), wherein said back support comprises a back support frame (8), wherein the seat frame (6) and back support frame (8) comprise frame connectors (7) for movably connecting these frames (6, 8) to each other."

"20. Use of a control system according to any of the claims 1-19, wherein said back support (4) is moved from said first position to said second position and/or vice-versa."

"21. Use of a control system according to any of the claims 1-19 for controlling a computer simulator program."

"22. Method for handling a computer simulation control system according to any of claims 1-19, wherein said back support is being moved to said second position for transportation and/or storage of the control system."

"25. Container, for example a box, in combination with a computer simulation control system according to any of claims 1-19, wherein the back support of the seat is positioned in said second position, wherein the back support extends substantially opposite the seat part (3) of the seat."

Claim 1 according to the first auxiliary request adds to claim 1 of the main request the following features:

"wherein the seat frame (6) comprises a bottom frame part (6a) and a rear frame part (6b), the rear frame part (6b) extending at said operating angle (α) upwardly from the bottom frame part (6a), wherein the back support frame (8) is movably connected to said rear frame (6b) part of the seat frame (6)."

Claims 20, 21, 22 and 25 according to the first auxiliary read as the main request.

VII. The appellant (proprietor) argued as follows:

Regarding the main request, the subject matter of claim 1 is new with respect to E1/E2 because the seat part and back support of that simulator seat are made of stiff boards, rather than being constructed about skeleton frames, therefore the seat has neither a seat frame nor a back support frame.

Starting from E1/E2, and knowing that racing car seats have frames, the skilled person would not modify the seat of E1/E2. Racing car seats are not designed for compact storage and so do not fold in the same way as the seat of E1/E2. Therefore the two kind of seats are technically incompatible.

Regarding the first auxiliary request, the arrangement as claimed leads to a more natural simulator environment. None of the prior art would lead to a seat frame with a bottom frame part and rear frame part as claimed.

VIII. The respondent (opponent) submitted no arguments.

Reasons for the Decision

1. The appeal is admissible

2. Background of the invention and interpretation of the claim

2.1 The invention relates to a computer simulator control system, including a seat coupled to a control module, see specification, paragraph [0001]. Such systems are known in the racing car industry, [0002] for realistically simulating a racing car environment, paragraph [0003]. The main idea of the invention is to make the system more compact when being transported and stored, paragraphs [0004] and [0006]. To this end, claim 1 as granted defines a seat part (3) and back support (4) of the seat whereby the latter is movable between a first (operating) position - in which it extends upwards from a seat part, figure 1- and a second (storage) position, different from the first position, figure 6.

2.2 Claim 1 of the present main and first auxiliary requests, first introduced in the opposition proceedings, add to claim 1 as granted, amongst other features, that the seat part comprises a seat frame and the back support comprises a back support frame.

The Board holds that in the context of a seat, the skilled person would understand the normal meaning of a "frame" to be a rigid, open structure, giving strength and shape to an object. Nothing different is suggested in the patent. Therefore the Board interprets the term "seat frame" as claimed to be a rigid, open structure giving the seat part its strength and defining its

shape. Likewise, it interprets "back support frame" as a rigid, open structure giving the back support its strength and shape.

3. Main request

3.1 Novelty with respect to E1/E2

3.1.1 According to claim 1, the seat part has a seat frame (6) and the back support a back support frame (8). The two frames are movably connected to each other by means of frame connectors (7).

The decision under appeal argues claim 1 to lack novelty with respect to E1/E2, see grounds, points 5.2.1 and 5.2.2. Like the invention, E1/E2 discloses a computer simulation control system, (see E1/E2 abstract, for example simulating a car, paragraph [0006]). Its main features are apparent from figures 1 and 2.

The system has control modules, for example the foot pedals 13, 14, and a seat having a seat part 1 and a back support 2. When seated, the user can control the foot pedals, these being coupled to the seat, by the bars 15. Figure 1 shows the back support 2 in a first (operating) position, in which it extends upwards from the seat part 1 approximately vertically. Figure 2 shows the back support 2 in a second (storage) position, in which it lies opposite the seat part.

Thus the question of novelty of the subject matter of claim 1 rests on whether or not E1/E2 also discloses that the seat part and back support comprise seat and back support frames respectively, and whether these are movably connected by frame connectors. In other words,

reading "frame" with its normal contextual meaning, do the seat part 1 and back support 2 comprise rigid open structures, giving them strength and shape, and are these structures movably connected by connectors?

The seat part 1 and back support 2 of E1/E2 are defined in its abstract with figure 1 as "seat board 1" and "back board 2". The word "board" suggests a relatively thin rigid sheet. Paragraph [0013] adds the information that the parts 1 and 2 are made from plastic, 3 to 5 mm thick and shaped by moulding. Thus the seat part and back support derive their strength from the inherent strength of a moulded sheet, not from a frame. Furthermore no frame is visible in figures 1 or 2. Thus the Board holds that E1/E2 does not disclose a seat frame, back support frame or frame connectors as claimed.

3.1.2 The Board adds that, regarding E1/E2, it is immaterial that the diaphragms 3 and 4 (figure 1) might contain a frame, as the decision argues. The diaphragms 3 and 4 are vibrators mounted on the seat part 1 and back support 2 respectively (figure 1 and paragraph [0012]). Thus mounted, they can neither lend strength to nor define the shape of the seat part or back support. Therefore neither they nor their constituent parts, such as the frames 58 and 60, mentioned in paragraph [0018] and shown in figure 6, are seat frames or back support frames as claimed.

3.1.3 The subject matter of claim 1 therefore differs from E1/E2 by the features:

- the seat part comprises a seat frame;
- the back support comprises a back support frame; and

- the seat frame and back support frame comprise frame connectors for movably connecting these frames to each other.

Consequently, contrary to the decision of the opposition division, the Board finds claim 1 to be new with respect to E1/E2, Article 54 EPC.

3.2 Inventive step starting from E1/E2

E1/E2 is a good starting point for assessing inventive step since, like the invention, it relates to a computer simulator system, for example for a driving simulator. Furthermore E1/E2 and the invention share a common underlying idea, namely that of providing the system with a seat which folds for compact storage, see E1/E2 paragraph [0019] and figure 2.

3.2.1 Considering the differing features given above in section 3.1.3, the patent is silent as to any particular effect achieved by using a seat frame and back support frame *per se*, see specification, paragraphs [0025] and [0026]. However, as the appellant acknowledges in his grounds for appeal dated 8 July 2010, page 3, third paragraph and page 6, last paragraph, conventional seats for cars, in particular real racing car seats, are of a frame construction. Moreover, applying general knowledge, the Board considers a seat made of frames to be a simple alternative to one made of moulded plastic sections, such as that of E1/E2.

Thus, the objective technical problem underlying the distinguishing features under section 3.1.3 above can be formulated as how to provide a computer simulation control system having a folding seat, as disclosed in

E1/E2, with a more realistic and simple alternative seat.

3.2.2 The skilled person making rigs for computer simulator control systems, would be familiar with hardware typically used in the environments he wishes to realistically simulate, in this case racing cars. In solving the objective technical problem, it would thus be immediately apparent to him that seating elements constructed about a frame provide a very genuine feel of sitting as a simple alternative to their moulded counterparts. Hence, in solving the above problem he would replace the rigid seat part and back support of E1/E2 with corresponding elements built from frames, as a matter of obviousness.

Furthermore, since it is the frames which provide rigidity in such a seat, he would inevitably need to join these frame parts together so that the back support can pivot relative to the seat part, for example by using the existing pivot joint in E1/E2 (paragraph 13 and figure 1, bolt 6). In other words, having decided to replace the rigid seat part and back support of E1 with simple frame parts, he would inevitably provide frame connectors as claimed. Thus the skilled person would arrive at the subject matter of claim 1 in an obvious manner.

3.2.3 Finally, contrary to the appellant's view, in the Board's view it is irrelevant whether or not conventional car seats with frames fold in the way claimed. Starting from E1/E2, the skilled person would not abandon the central underlying idea to realise a compact seat for storage by folding (paragraph [0019]). Thus he would make the frame-built sections of the new

seat fold about a pivot in the same way as the corresponding parts of E1/E2.

3.2.4 The Board concludes that claim 1 lacks inventive step, Articles 52(1) and 56 EPC, therefore the main request must fail. Consequently it is not relevant whether or not claim 1 additionally lacks novelty with respect to "game chopper" E12, as the opposition division found, cf. point 5.2.4 of the impugned decision.

4. First Auxiliary request
Claim 1 is the same as the main request, but adds the feature that the seat frame (6) comprises bottom frame part (6a) and a rear frame part (6b), the rear frame part (6b) extending at said operating angle (α) upwardly from the bottom frame part (6a), wherein the back support frame (8) is movably connected to said rear frame (6b) part of the seat frame (6).

4.1 Allowability of the amendments

Claim 1 has a basis in original claims 1, 2, 6, and lines 3 to 6 of claim 7, whereby an optional feature in original claim 1 is deleted. Furthermore, the features added to claim 1 as granted limit its scope. The decision found claim 1 to meet the requirements of Articles 123(2) and (3) EPC, see grounds 6.1.1 and 6.1.2. The Board sees no obvious reason to question this aspect of the decision. Moreover, the wording of independent claims, 20, 21, 22, and 25, which refer to claim 1, are as granted and are based on the respective original claims, except for the removal of the word "preferably" in claim 25. In view of the above, the Board is satisfied that the amendments are allowable, Articles 123(2), 123(3) EPC.

4.2 Novelty of claim 1 with respect to E1/E2 or "gamechopper", E12.

4.2.1 As explained above in section 3.1.3 with respect to the main request, E1/E2 does not discloses a seat with a seat frame or back support frame. Claim 1 of the first auxiliary request has all features of the main request. Therefore, for the same reasons, the Board finds the subject matter of claim 1 to be new with respect to E1/E2, so does not follow the impugned decision in this respect.

4.2.2 Leaving aside the question as to whether or not "gamechopper" or documents E10 to E12 constitute prior art within the meaning of Article 54(2) EPC, the Board notes that "Gamechopper" is a computer simulation control system rig with a folding seat, see E12, screenshots. E12, Page 1 shows the seat in use, with the seated user operating controls coupled to the seat via a rigid frame. When the seat is folded, the back support is opposite to the seat part (page 3). Furthermore, both the back support and seat part have frames (pages 2 and 4).

4.2.3 The question of novelty with respect to E12 therefore hinges on whether, as the decision argued (grounds point 6.2.4), the seat frame comprises a bottom frame part and a rear frame part, the rear frame part extending at the operating angle of the back support (α) upwardly from the bottom frame part, the back support frame being movably connected to said rear frame part of the seat frame.

From E12 page 4, the "gamechopper" seat part appears to have a single square frame, therefore the Board is unable to identify any component bottom frame part and

rear frame part. Keeping in mind the normal meaning of a frame in the present context, although two supports extend below the seat frame, these are not part of the seat frame, since they neither give strength to the seat part nor determine its shape. Likewise the rectangular plate elements between the back support frame and the seat frame, connect these two frames together. Therefore they are frame connectors, and not a rear frame part as claimed. In any case, they do not extend from the seat at the same operating angle as the back support.

Therefore the subject matter of claim 1 differs from "gamechopper", E12, by the features of the seat frame having a bottom frame part and a rear frame part, arranged as claimed, and is thus novel with respect to "gamechopper".

4.3 Inventive step

4.3.1 The Board holds that the "gamechopper" system is the best starting point for assessing inventive step. Like the invention it discloses a simulator rig having a folding seat. In contrast to E1/E2 it also discloses a seat part with a seat frame and back support with a back support frame. The question of inventive step vis-à-vis "gamechopper", as shown in E12, rests on whether or not the skilled person would arrive at the particular form of seat frame and its arrangement relative to the back support frame as claimed, in an obvious manner.

4.3.2 As explained in the specification paragraph [0027], in conjunction with figures 3 to 8, the technical effect of a seat frame 6 having a rear frame part 6b extending upwardly from a bottom frame part 6a at the same angle

(α) as the back support frame, is that in this position it can support a user's back whilst also enabling the provision of side support frame parts 16a, joining the bottom frame part 6a to the rear frame part 6b. See patent figures 3 and 4. Therefore, rigid bucket seat side parts may also be provided.

Thus the objective technical problem can be formulated as how to modify a folding seat of a racing car simulator system made of frames, such as the "gamechopper" of E12, to enhance the body support of a user when seated for handling the at least one control module.

4.3.3 As stated under point 4.2.3 of this decision, the rectangular side plate elements in the pictures shown on page 1, 4 and 5 of E12 are considered to form frame connectors between the back support frame and the seat frame of the “gamechopper” seat, rather than a distinct rear frame part of the seat frame itself. Thus, merely based on his common technical knowledge, the skilled person would firstly get no suggestion to modify the rectangular side plate elements of E12 such that they would form part of the seat frame, much less ones extending at the same operating angle as the back support as also required by claim 1, if a user’s body support is to be improved.

4.3.4 Secondly, faced with the objective technical problem to enhance the body support of the user, the Board holds that the skilled person would also not consider changing the underlying seat frame of "gamechopper" in the light of the known prior art.

E3 discloses a similar simulator rig to that of E1/E2 described above in 3.1.1. Both have folding seats with

moulded plastic (none-framed) seat parts and back supports (E3 page 4, lines 8 to 10, figures 1 to 3; E1/E2, paragraph [0013]). Since the plastic moulded shell of for example E1/E2 is moulded into a body shape (paragraph [0004], figure 1), the skilled person would rather be led away from any frame based construction of claim 1. Consequently, modifying the seat frame of "gamechopper" to make a further hybrid seat, having a frame mimicking the shape of a moulded plastic sheet, goes well beyond the routine skills of the skilled person.

Of the remaining prior art considered by the opposition division and mentioned by the appellant, none discloses how to make seats constructed from frames, let alone any details of a seat frame. For example, E4 and E5 disclose simulator rigs with adjustable seats (E4 page 5, lines 6 to 10, figure 1; E5 figure 2, seat 45 and paragraph 20), neither mentions whether or not the seat is made from frames. E13 discloses a folding car seat (page 2), likewise with no mention of it having a frame. Therefore the skilled person would have no hint from these documents as to how to modify the seat frame of "gamechopper" to solve the objective technical problem.

4.3.5 In summary, starting from "gamechopper", as shown in E12, the skilled person would not, as a matter of obviousness, modify the seat frame of "gamechopper" to provide a bottom frame part and rear frame part as claimed. Thus the Board finds claim 1 to involve an inventive step.

4.3.6 As explained above, the seats of E1/E2 and E3 are more remote from the invention than "gamechopper" in that they are not constructed of frames arranged in a

particular way as is the case in this request. Thus, in the view of the Board, these documents are not considered a suitable starting point for the assessment of inventive step of claim 1 of the first auxiliary request.

4.3.7 In view of the above, the Board concludes that the subject matter of claim 1 of the first auxiliary request involves an inventive step, Article 52(1) with 56 EPC.

4.4 Remaining independent claims

Claims 20 and 21 relate to the use of the system of claim 1. Since the system is new and inventive, its use is likewise unobjectionable. Similarly, a method of handling the device of claim 1 likewise involves its use (claim 24) and a container in combination with the system of claim 1 (claim 25) includes the system of claim 1. Therefore these claims are unobjectionable.

4.5 The Board adds that since "gamechopper" and associated documents E10 to E12 neither take away novelty nor render the subject matter of the claims obvious as explained above, whether or not they constitute prior art in the sense of Article 54 (2) EPC is irrelevant for this decision.

5. No further objections are raised or are apparent against the claims according to the first auxiliary request. Noting that the description has been brought into conformity with these claims as amended, the Board finds that the patent and the invention to which it relates now meets the requirements of the EPC. It concludes that the patent can be maintained in this amended form in accordance with Article 101(3) a EPC.

6. Since the first auxiliary request is allowable, there is no need for the Board to consider the remaining auxiliary requests.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent as amended in the following version:

   Description: pages 1 to 12 filed on 13 December 2013 as first auxiliary request.

   Claims: 1 to 27 filed with the statement of grounds of appeal as first auxiliary request.

   Drawings: Figures 1 to 8 of the patent specification.

The Registrar: The Chairman:

G. Magouliotis E. Frank

Decision electronically authenticated