

Internal distribution code:

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

**Datasheet for the decision
of 24 October 2024**

Case Number: T 1599/21 - 3.4.03

Application Number: 12870629.8

Publication Number: 2823504

IPC: H01J49/06, H01J37/05,
G01N23/2273

Language of the proceedings: EN

Title of invention:

ANALYSER ARRANGEMENT FOR PARTICLE SPECTROMETER

Patent Proprietor:

Scienta Omicron AB

Opponent:

MB Scientific AB

Headword:

ARPES II

Relevant legal provisions:

EPC Art. 101(3)(b), 56

Keyword:

Inventive step - (no) - obvious solution - common general
knowledge - technical prejudice in the art (no) - long felt
need (no)

Decisions cited:

T 2620/19



Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0

Case Number: T 1599/21 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 24 October 2024

Appellant: MB Scientific AB
(Opponent) Fålhagsleden 61
753 23 Uppsala (SE)

Representative: Brann AB
P.O. Box 3690
Sveavägen 63
103 59 Stockholm (SE)

Respondent: Scienta Omicron AB
(Patent Proprietor) Box 15120
750 15 Uppsala (SE)

Representative: Zacco Sweden AB
P.O. Box 5581
Löjtnantsgatan 21
114 85 Stockholm (SE)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
9 July 2021 concerning maintenance of the
European Patent No. 2823504 in amended form.**

Composition of the Board:

Chairman T. Bokor
Members: M. Stenger
J. Thomas

Summary of Facts and Submissions

I. The appeal of the opponent is against the interlocutory decision of the opposition division to maintain European patent No. EP 2 823 504 in amended form according to the then auxiliary request 2. The opposition was based on the grounds set out in Article 100(a) EPC in combination with Article 56 EPC and Articles 100(b) and 100(c) EPC.

II. Reference is made to the following documents:

D1: User Manual for Scienta Electron Spectrometer
SES 2002

D2: US-4358680

D6: Compilation of e-mails labelled X1 to X5

D9: User Manual Scienta R4000

D10: WO2011019457 A1

D12: Technical description SES 200

III. The opposition division further considered that the information content of D6 in e-mails X1 to X4 had been publicly available at the priority date of the contested patent (section 4.4.1 of the decision).

With respect to the independent claims of the then second auxiliary request, the opposition division found that the subject-matter of the independent claims involved an inventive step *inter alia* in view of D1 combined with X2.

IV. At the end of the oral proceedings before the board, the parties had the following final requests:
The appellant-opponent requested that the contested decision be set aside and that the patent be revoked.

The respondent-patent proprietor requested to cancel the contested decision and to maintain the patent in amended form according to the second auxiliary request filed with the reply to the statement of the grounds of appeal.

The claims of this sole request are based on the claims of the second auxiliary request as maintained by the opposition division and the fourth auxiliary request filed during the first instance proceedings before the first instance oral proceedings.

During the written phase of the appeal proceedings, in their reply to the opponent's grounds for appeal, the respondent had further conditionally requested that documents X1 to X4 of D6 not be admitted as state of the art for the purposes of Article 54(2) and 56 EPC, should the board be minded to decide against the respondent and would find lack of novelty or lack of inventive step for any of their requests then pending, based on the content of these documents.

V. Independent method claim 1 of the second auxiliary request reads as follows (labelling of the features added by the board in line with the contested decision and the appellant's submissions):

1. *A method for determining at least one parameter related to charged particles emitted from a particle emitting sample (11), comprising the steps of:*
 - 1.1 *forming a particle beam of said charged particles and*
 - 1.2 *transporting the particles between said particle emitting sample (11) and an entrance (8) of a measurement region (3)*

- 1.2.1 *by means of a lens system (13)*
 - 1.2.1.1 *having a substantially straight optical axis (15),*
 - 1.3 *deflecting the particle beam in at least a first coordinate direction (x, y)*
 - 1.3.1 *perpendicular to the optical axis of the lens system*
 - 1.3.2 *before entrance of the particle beam into the measurement region,*
 - 1.4 *deflecting the particle beam in the same at least first coordinate direction (x, y)*
 - 1.4.1 *at least a second time*
 - 1.4.2 *within the lens system and*
 - 1.4.3 *before entrance of the particle beam into the measurement region,*
 - 1.4.3.1 *wherein all deflections of the particle beam takes place within the lens system, meaning that at least one lens (L1) acts on the particles before the first deflection of the particle beam and at least one lens (L3) acts on the particles after the last deflection of the particle beam,*
 - 1.5 *detecting the positions of said charged particles in said measurement region,*
 - 1.5.1 *the positions being indicative of said at least one parameter,*
- characterised in that**
- 1.6 *the lens system being operated in angle-resolved mode,*
 - 1.6.1 *such that charged particles emitted with the same angle against the optical axis are focused to the same point in the entrance plane of the measurement region; and*
 - 1.7 *controlling the deflections of the particle beam such that*
 - 1.7.1 *a predetermined part (A, B) of the angular distribution (39) of the particles forming the particle*

beam passes the entrance (8) of the measurement region (3)

1.7.2 in a direction being substantially parallel to the optical axis (15) of the lens system (13),

1.7.3 wherein a series of different predetermined parts are successively recorded.

- VI. Independent apparatus claim 7 of the second auxiliary request is directed at an analyser arrangement, the features of which correspond to the method features of claim 1.
- VII. During the oral proceedings before the board, the appellant essentially submitted objections with respect to lack of inventive step referring to documents D1, D2, D6, D9, D10 and D12.
During the written phase, the appellant had further submitted objections relating to lack of sufficiency of disclosure, lack of novelty, lack of clarity and added subject-matter, in the form of an inadmissible intermediate generalisation.
- VIII. During the oral proceedings before the board, the respondent essentially submitted arguments supporting the presence of an inventive step based on the content of documents D1, D2, D6, D9, D10 and D12.
During the written phase, the respondent had also submitted arguments concerning the public availability of the e-mails forming part of D6.

Reasons for the Decision

1. The appeal is admissible.
2. The legal status of D6 as state of the art

2.1 Admittance

As set out in the Board's communication under Article 15(1) RPBA, the e-mails X1 to X4 of D6 were considered to constitute prior art and discussed during the proceedings before the opposition division. The board is not aware of any legal basis in the EPC for excluding in appeal proceedings documents admitted into the earlier proceedings which have lead to the contested decision - effectively "un-admitting" such documents - , particularly if the contested decision is based on them. Following the consistent case law of the Boards of Appeal on this issue (*Case Law of the Boards of Appeal (CLBA)*, 10th edition 2022, V.A.3.4.4), the admission of D6 thus cannot be challenged, contrary to the conditional request of the respondent.

The respondent did not bring any further arguments against this assessment of the board, either in writing or in the oral proceedings before the board.

2.2 Public availability

The respondent had, in the written phase of the appeal proceedings, submitted that the e-mails being part of D6 had not been publicly available due to (at least implicit) confidentiality clauses.

However, the board notes that the e-mails X1 to X4 forming part of D6 have been sent and received by a number of different people working for different organisations before the filing date (6 March 2012) of the contested patent (X1: 4 January 2011, X2: 14 December 2010, X3: 12 November 2010, X4: 13 January 2011). In addition, X1 to X4 do not include any explicit confidentiality clause, and there is no

indication for the presence of an implicit one. Thus, their content must be considered to have been publicly available at the filing date of the contested patent and represents prior art, as found by the present board in the parallel case T 2620/19, Reasons 3.3, presumed to be known to the parties, and also explicitly referred to in the board's communication.

2.3 For the sake of completeness, the board notes that it is not aware of any evidence that X1 to X4 should be treated as one single piece of prior art (see also T 2620/19, Reasons 3.2).

The board further notes that the e-mail labelled X5 filed as part of D6 is dated 24 May 2016, i.e. it was sent after the filing date of the contested patent.

Following the board's communication the respondent did not further comment on the public availability of X1 to X5, either in writing or in the oral proceedings.

3. Article 56 EPC

3.1 The **opposition division**, with respect to claim 1 of the then second auxiliary request (corresponding to claim 1 of the present second auxiliary request without features 1.7, 1.7.1, 1.7.2 and 1.7.3), held that D1 did not disclose features 1.4.2 and 1.4.3.1 (section 4.4.2 of the contested decision).

It further held that the skilled person starting from the analyser of D1 would not consider, based on the information of X2, to place an additional deflector at (or to move deflector A9 to) a position within the lens system such that at least one lens acts on the particles before the first deflection of the particle beam and at least one lens acts on the particles after the last deflection (as required by feature 1.4.3.1).

Instead, the opposition division considered that the skilled person, wishing to implement the teaching of e-mail X2 (which mentions placing a deflector close to the slit) in the system of D1 would attempt to make use of deflector A9, which is already located close to the slit, rather than locating a different deflector within the lens system.

3.2 The **appellant's** submissions

3.2.1 The appellant submitted that D1 could be considered as the closest prior art, in line with the contested decision. D9 and D12 were equally suitable to be chosen as closest prior art. This was undisputed between the parties, given the similarity of the ARPES (angular resolved photoelectron spectroscopy) systems to which those documents related, all of which were products of the respondent.

3.2.2 In addition, the appellant submitted that although claim 1 of the sole request differed from any of these documents by features 1.4.2 and 1.4.3.1, each of these documents disclosed features 1.7, 1.7.1 and 1.7.2, as well as feature 1.7.3.

3.2.3 The appellant argued that starting from any of these documents, the skilled person would consider X2 and X3. Both e-mails suggested adding a deflector and operating it such that rotation of the sample could be avoided. In addition, it was generally known to the skilled person that one additional deflection would not be sufficient to effectively move an electron beam, at least not such that it entered the measurement region in a direction substantially parallel to the optical axis of the lens system, which was indispensable in the

case of a hemispherical analyser. Instead, a second deflection was needed for this purpose.

3.2.4 Moreover, it was apparent from the e-mails of D6 that deflecting the electron beam instead of tilting and rotating the sample provided a great advantage. This potential great advantage justified a great effort to put the corresponding solution into place.

3.2.5 The appellant furthermore submitted that there was no prejudice against performing deflections in an electron lens operated in angular mode.

Lens 10-10 disclosed in D10 provided an example.

Another example was provided in D2. Both documents D2 and D10 only disclosed the common general knowledge of the person skilled in electron optics, and in view of this common general knowledge, the skilled person would have known exactly which consequences the omission of individual elements of the systems disclosed in D2 (for example the barrier 3a) and D10 would have had. For the second lens ZL, D2 even explicitly mentioned that it could be omitted (column 7, lines 15 to 17). In addition, X2 explicitly suggested to put the additional deflector in the lens.

D9 was a manual of the R4000 instrument of the respondent and its contents, in particular the parts on page 1-4 instructing the user not to apply any voltage to the octagonal deflector in angular mode did not necessarily apply to the instruments disclosed in D1 and D12.

Instead of having to overcome a prejudice to place the additional deflectors in the lens, the skilled person would have known that this had the advantage of providing a compact design, with possibly fewer parts.

3.2.6 The position close to the slit of the additional deflector referred to in X2 was only suggested as one possibility and the skilled person would consider many other possible positions for the additional deflector as well. In addition, X1 suggested two possible positions for the additional deflector, not only the final focal plane.

3.2.7 Thus, starting from either one of D1, D9 or D12 and using the teaching of X2 or X3 in addition to the common general knowledge of the skilled person, the skilled person would arrive at the subject-matter of claim 1 without the exercise of an inventive step.

3.3 The **respondent** 's submissions

3.3.1 The respondent concurred that features 1.4.2 and 1.4.3.1 represented the crucial distinguishing features over D1, D9 and D12. It emphasized that the deflector A9 of D1 and D12 was placed outside the lens system. In addition, this deflector was only suitable for the correction of small misalignments, but not for the predetermined selection of a part of the angular distribution of the beam.

3.3.2 They argued that starting from any of D1, D9 or D12, the skilled person would have to overcome at least **three hurdles** for arriving at the subject-matter of claim 1 of the second auxiliary request.

The **first hurdle** was that it would have to overcome the prejudice that deflections of particles in an electron lens system were to be avoided when the system was operated in angular mode for ARPES. Such deflections would lead to errors that would be further amplified by the lens system. D9 on page 1-4 explicitly instructed

the users that the voltage applied to the deflector plates in the lens system should be 0 V during angular multiplexing measurements.

The **second hurdle** was the teaching of X1 to X3. X1, X2 and X3 referred to a single deflector package only.

In addition, X2 mentioned to position the single deflector package either outside or inside the lens, but in any case close to the slit. The skilled person would follow the advice of X2 concerning this position close to the slit, whereby it would be led away from the invention. X2 could at best be interpreted as suggesting a solution (to place the second deflector at a position similar to that of deflector A9) that already existed in the SES-2002 and SES-200 systems as disclosed in D1 and D12.

X3 provided a similar teaching as X2 with a deflector placed close to the slit (see "Idea 1"). Even if the skilled person ignored the explicit teaching of X2 and X3, it would not place the deflector package far away from the slit, since this would lead to distortions that would be magnified. X1 explicitly suggested to put the deflector package in the final focal plane at the end of the lens to achieve less severe negative effects of the deflection.

Finally, the **third hurdle** was that the skilled person would not know which of the elements of the system disclosed in D2, for instance the barrier 3a and/or the second lens ZL, could be omitted without prejudicing the operability of that system, which differed from the systems disclosed in D1, D9 and D12. The same applied to document D10.

The likelihood of the skilled person overcoming any of these three hurdles alone was already low, let alone overcoming all three hurdles.

3.3.3 In addition, there was a long felt need for the invention of the contested patent as was apparent from the e-mails of D6. However, nobody knew how to realise the corresponding idea. Otherwise, this would have been done much earlier.

3.3.4 The skilled person would therefore not have arrived at the subject-matter of claim 1 in an obvious manner.

3.4 The finding of the **board** (see also T 2620/19, Reasons 6. and 7. as well as the corresponding subsections)

3.4.1 Closest prior art

Both D1 (section 2.2.3 "Angular dispersive mode") and D12 (section 1.1, "operate the lens in a non-imaging manner, in order to utilise angular distributions etc." and section 1.6.8 on page 7, "angular mode") disclose an ARPES system sharing the most relevant technical features with the contested patent. The board thus concurs with the parties that any of these documents may be considered as representing the closest prior art. In the following, the board will focus on D12 as closest prior art.

3.4.2 Disclosure of D12

D12 discloses an electron analyser system with a hemispherical detector that can be operated in non-imaging mode (ARPES). Thus, D12 discloses features 1.,

1.1, 1.2, 1.2.1, 1.2.1.1, 1.5, 1.5.1, 1.6 and 1.6.1.
This was not disputed by the parties.

In addition, the board notes that, as submitted by the respondent, the deflector A9 in D12 is used to compensate for a small misalignment of the lens or small imperfections of the lens (section 1.2.3 of D12). This is done such that a maximum number of the electrons passing the analyser aperture also pass through the analyser's entrance slit. That is, the deflector A9 is controlled in a way that it deflects the electrons such that they pass the entrance of the measurement region in a direction substantially parallel to the optical axis of the lens system as required by features 1.7 and 1.7.2. The presence of the analyser aperture in angular mode implies that this concerns a predetermined part of the angular distribution of the particles as defined in feature 1.7.1.

That is, D12 discloses features 1.7, 1.7.1 and 1.7.2 as well, in line with the submission of the appellant.

Such small misalignments and imperfections are always present, i.e. also during measurements. Thus, the deflector A9 deflects the particle beam in a first coordinate direction during all measurements as required by features 1.3, 1.3.1 and 1.3.2, including measurements in angular mode as required by features 1.6 and 1.6.1.

The board concurs with the parties that D12 does not disclose features 1.4.2 and 1.4.3.1, in line with the finding of the opposition division w.r.t. D1.

The board notes that D12 does not mention explicitly that any voltage is applied during measurements in angular mode to the octagonal deflector shown in

Figure 1.1-1. Moreover, D9, which relates to a similar instrument as D12, even explicitly states that the deflector plates in the lens of the Scienta R4000 - arranged approximately at the same position as the octagonal deflectors shown in D12 - should always be 0 V during angular multiplexing measurements, as submitted by the respondent. Applying a voltage to the octagonal deflectors during measurements in angular mode in instruments such as the one described in D12 can thus not be considered to be directly and unambiguously implicitly disclosed.

Thus, D12 neither explicitly nor implicitly discloses features 1.4, 1.4.1 and 1.4.3.

Finally, the overall aim of the invention is to eliminate or to reduce the need for physical manipulation, such as tilting and rotating the sample (see paragraphs [0024] and [0025] of the patent). Thus, in view of the patent as a whole, the skilled person would consider that the series of different predetermined parts that are successively recorded according to feature 1.7.3 is recorded by controlling the first and second deflections and not by rotating or tilting the sample. Thus, although D12 mentions automatic X-Y mappings by means of a computer controlled manipulator (section 1.6.6), it does not disclose feature 1.7.3 in the sense of the patent as a whole, contrary to the submission of the appellant.

3.4.3 Distinguishing features

In view of the above, claim 1 of the second auxiliary request differs from D12 by features 1.4, 1.4.1, 1.4.2, 1.4.3, 1.4.3.1 and 1.7.3.

3.4.4 Technical effect and objective technical problem

The technical effect of the distinguishing features is that parts of the angular distribution of the particle beam which could normally not be measured without tilting and rotating the sample can be measured now by means of controlling the deflections.

The objective technical problem may then be formulated as how to eliminate the need for moving the sample. This is in line with the aim of the invention set out in the contested patent ([0024], [0025] and [0026]) and with the submissions of the appellant.

3.4.5 X2, X3 and the common general knowledge

(a) additional deflections

Like D12, each of X2 and X3 relates to a Scienta ARPES analyser. Both X2 and X3 mention the objective technical problem defined above.

Thus, in line with the submissions of the appellant, the board holds that the skilled person, starting from D12 and trying to solve the objective technical problem defined above, would consider X2 and X3. Further, it would be prompted by the information comprised in each single one of these e-mails to add a deflector and to operate it such that rotation of the sample is avoided.

The board takes note of the argument of the respondent (submitted w.r.t. the second hurdle) that X2 and X3 explicitly suggest the use of a single deflector package deflecting the electrons perpendicular to the optical axis of the lens system.

However, D12 relates to a hemispherical analyser. As set out by the appellant (and in line with section 1.2.3 of D12), it is a requirement in such analysers that the particle beam entering the measurement region must be substantially parallel to the optical axis of the lens system.

Thus, the skilled person, starting from D12 and being prompted by X2 or X3 to add a deflector for deflecting the particle beam perpendicular to the optical axis of the lens in order to avoid tilting and rotating of the sample, would know that it would have to correct the direction of the particle beam before entry into the hemispherical analyser such that it becomes aligned with (and therefore is substantially parallel to) the optical axis of the lens.

The most straightforward solution for correcting the direction of the particle beam in that manner would be the use of a second additional deflector to deflect the electrons in a direction anti-parallel to the direction of the deflection performed by the first additional deflector suggested by X2 and X3.

This finding is in line with the submission of the appellant that it was generally known that an electron beam had to be deflected twice in order to effectively move it (i.e. such that it entered the measurement region in a direction substantially parallel to the optical axis of the lens system, which was indispensable in the case of a hemispherical analyser).

The board notes that the deflector A9 in D12 is used for the purpose of correcting the direction of the electrons. That is, although A9 was used only for correcting small misalignments, as submitted by the respondent, D12 discloses the general concept of correcting the direction of electrons.

The board is, however, not aware of any reason why the skilled person would necessarily use this particular deflector A9 (which already has a specific purpose) as the second additional deflector mentioned above, that is, for correcting the direction of the electron beam deflected by the first additional deflector in order to avoid tilting or rotating of the sample. The board notes that this is contrary to the finding of the opposition division (the division reasons its decision w.r.t. D1). Instead, the board holds that the skilled person would add such a second deflector at any convenient place in the instrument of D12 depending on the circumstances.

It follows from the above that the skilled person, starting from D12, would be prompted by any of X2 and X3 and its common general knowledge to add first and second deflectors in the system of D12 such that rotating and tilting of the sample can be avoided, without the exercise of an inventive step. In terms of the claimed features, it would thus incorporate features 1.4, 1.4.1, 1.4.3 and 1.7.3 into the ARPES system disclosed in D12 without the exercise of an inventive step.

The board notes that this finding does not necessarily imply that any of the deflectors already present in D12 (octagonal deflector in the lens and deflector A9) is used by the skilled person for the purpose of incorporating features 1.4, 1.4.1, 1.4.3 and 1.7.3.

(b) Position of the additional deflectors

Once the skilled person, prompted by X2 or X3, has decided to add two deflections in the system of D12 as

set out above, it will inevitably be faced with the follow-up problem of where to introduce these additional deflections of the electron beam within the electro-optical imaging system, leading to the problem of the positioning of the deflectors necessary to achieve the additional deflections.

X2 (second paragraph) explicitly suggests to put the first additional deflector, which is provided to avoid rotating the sample, in the lens, as submitted by the appellant. X2 further suggests to put it "probably close to the slit". Thus, the skilled person reading X2 would consider to put the additional deflector (in the lens) close to the slit, as submitted by the respondent. However, in particular since the prospective advantages mentioned in the e-mails of D6 justify a relatively great effort, as submitted by the appellant, the skilled person would also consider other positions (in the lens), as also submitted by the appellant.

In addition, the skilled person would also have to define the position where the second additional deflection, which is provided to re-align the deflected electron beam with the optical axis of the lens system, is to be performed.

While trying to solve the follow-up problem mentioned above, the skilled person would be aware from its common general knowledge that such deflections can be performed inside the elements of the lens. This is not only suggested in X2 for the first additional deflector but also exemplified in D2 and D10, as submitted by the appellant.

More particularly, both D2 and D10 give examples of double deflections performed in lens systems. The board takes note of the argument of the respondent that there

are differences between the systems disclosed in these documents and the ARPES system disclosed in D12. Nevertheless, the board concurs with the appellant that the skilled person would have known the roles of the individual elements of the systems disclosed in D2 and D10 and would therefore also have known the consequences of keeping or omitting individual elements, contrary to the submissions of the respondent w.r.t. the third hurdle.

The board notes the submission of the respondent that D9 discloses that the deflector plates denoted Up/Down and Left/Right should always be 0 V for angular multiplexing measurements. However, D9 does not give a reason why this should be so. In particular, there is no indication in D9 that this requirement should be generally met for electron lenses in angular mode. Instead, this requirement could be linked to a particular property of the R4000 analyser described in D9, in line with the submissions of the appellant.

X1 may suggest that the (first) additional deflector should preferably be placed in the final focal plane "where the Scienta slit is placed", as submitted by the respondent. However, X1 also mentions another possible position for this deflector which is clearly in the lens, in line with the submission of the appellant.

Thus, neither D9 nor X1 provide evidence that a general prejudice existed in the technical field according to which no deflections should be performed inside an electron lens when it is operated in angular mode. Instead, D2 and D10 give examples for such deflections performed inside an electron lens during its operation and thus support the submission of the appellant that there was neither a fundamental problem nor a general

prejudice against performing (double) deflections in an electron lens during its operation, contrary to the respondent's view w.r.t. the first hurdle.

When trying to solve the follow-up problem mentioned above, the skilled person would take into account the respective advantages (and disadvantages) of the possible positions of the additional deflectors in the instrument. For instance, the skilled person would know from its common general knowledge that performing the deflection outside the electron lens would have the advantage of decoupling the deflections and the lens actions. However, the skilled person would also know from its common general knowledge that performing the deflections within the electron lens would have the advantage of providing a compact design, with possibly fewer parts, as submitted by the appellant.

In view of these generally known advantages (and respective disadvantages), the skilled person would, depending on the circumstances, consider realising the additional deflections and putting the additional deflectors inside the electron lens, according to features 1.4.2 and 1.4.3.1, relying on its common general knowledge, as one straightforward and promising solution and without an inventive step.

3.4.6 Long-felt need

For the sake of completeness, the board notes that e-mails X1 to X4 were sent between November 2010 and January 2011. This is just over a year before the filing date of the contested patent (6 March 2012). The board does not consider this period to be long enough to establish a "long felt need", contrary to the respondent's submission.

3.4.7 Inventive step

It follows from the above that the skilled person, starting from D12 and taking into account the information from e-mail X2 (that by means of an additional deflector in the lens, tilting and rotating of the sample could be avoided) and its common general knowledge would incorporate features 1.4, 1.4.1, 1.4.2, 1.4.2, 1.4.3.1 and 1.7.3 into the system disclosed in D12 in an obvious manner. Thus, the subject-matter of claim 1 of the second auxiliary request lacks an inventive step within the meaning of Article 56 EPC.

4. Conclusion

The respondent's sole request does not fulfil the requirements of Article 56 EPC. Hence, taking into consideration the amendments made by the proprietor, the patent and the invention to which it relates do not meet the requirements of the EPC. Therefore, the patent is to be revoked under Article 101(3)(b) EPC.

The other objections of the appellant submitted during the written phase of the appeal proceedings (see section VII. above) need not be examined.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



S. Sánchez Chiquero

T. Bokor

Decision electronically authenticated