

**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 July 2024**

**Case Number:** T 0437/20 - 3.4.03

**Application Number:** 13854849.0

**Publication Number:** 2921914

**IPC:** G03H1/02, B42D25/328,  
B42D25/47, G02B5/18,  
B42D25/324, B42D25/351,  
B42D25/369, B42D25/475

**Language of the proceedings:** EN

**Title of invention:**

CARD WITH LIGHT DIFFRACTION LAYER LAMINATED SHEET AND METHOD  
FOR PRODUCING THE CARD

**Patent Proprietor:**

Dai Nippon Printing Co., Ltd.

**Opponent:**

Leonhard Kurz Stiftung & Co. KG

**Headword:**

**Relevant legal provisions:**

EPC Art. 100(c), 123(2)  
RPBA 2020 Art. 12(3), 12(4), 12(5), 13(1), 13(2)

**Keyword:**

Grounds for opposition - added subject-matter (yes)  
Amendments - added subject-matter (yes) - allowable (no) -  
inescapable trap (yes)  
Reply to statement of grounds of appeal - party's complete  
appeal case - reasons set out clearly and concisely (no)  
Amendment to case - exercise of discretion - amendment  
overcomes objection (no)

**Decisions cited:**

T 0714/00

**Catchword:**

1. Where the opponent appeals against the maintenance of the patent in unamended form and auxiliary requests filed before the opposition division are not discussed in the impugned decision, such auxiliary requests need to be substantiated when re-submitted in appeal, even in the absence of previous arguments against such requests in the file.
2. Should the main request fall, the respondent proprietor must normally request that the decision be set aside and argue why the patent should be maintained in an amended form, i.e. why the decision under appeal should be amended within the meaning of Article 12(3) RPBA (Reasons 3.1.3).
3. Given that there are no tangible arguments in the impugned decision why these requests should or should not be held allowable, the board cannot proceed in the usual manner to review the decision under appeal. On the other hand, the board also cannot allow these requests without examining them on their merits. Under these circumstances it is first and foremost the duty of the proprietor to give reasons how the auxiliary requests would overcome the objections against the main request (Reasons 3.1.4).
4. Given that an auxiliary request becomes relevant where a higher ranking request is not allowable, arguments provided for the higher ranking request cannot be sufficient for allowing the lower ranking request. Something additional is required (Reason 3.1.6).



**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  
Fax +49 (0)89 2399-4465

Case Number: T 0437/20 - 3.4.03

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

**Appellant:** Leonhard Kurz Stiftung & Co. KG  
(Opponent) Schwabacher Strasse 482  
90763 Fürth (DE)

**Representative:** Zinsinger, Norbert  
Louis Pöhlau Lohrentz  
Patentanwälte Partnerschaft mbB  
Merianstraße 26  
90409 Nürnberg (DE)

**Respondent:** Dai Nippon Printing Co., Ltd.  
(Patent Proprietor) 1-1-1, Ichigaya-Kagacho  
Shinjuku-ku  
Tokyo 162-8001 (JP)

**Representative:** KATZAROV S.A.  
Geneva Business Center  
12 Avenue des Morgines  
1213 Petit-Lancy (CH)

**Decision under appeal:** **Decision of the Opposition Division of the European Patent Office posted on 20 December 2019 rejecting the opposition filed against European patent No. 2921914 pursuant to Article 101(2) EPC.**

**Composition of the Board:**

**Chairman** T. Häusser  
**Members:** A. Böhm-Pélissier  
T. Bokor

## **Summary of Facts and Submissions**

I. The appeal is against the decision of the opposition division rejecting the opposition against European patent EP 2 921 914 B1. The patent was opposed in its entirety *inter alia* on the grounds of extension of subject-matter beyond the content of the application as filed (Article 100(c) EPC).

II. Reference is made to the following **documents**:

D5 = WO 01/68383 A1

P1 = Jianhui Q and al., Thermal Welding by the Third Phase Between Polymers: A Review for Ultrasonic Weld Technology Developments, *Polymers* 2020, 12(4), 759 (introduced by the respondent [patent proprietor])

III. **Requests**

The **appellant (opponent)** requests that the decision under appeal be set aside and the patent be revoked.

The **respondent (patent proprietor)** requests

- (a) that the appeal be dismissed (main request),
- (b) alternatively that the decision under appeal be set aside and the patent be maintained according to auxiliary request 9, or
- (c) that the case be remitted to the opposition division for the examination of auxiliary requests 3, 8, 11 and 12.

IV. **Claim 1** of the **main request** reads as follows

(labelling "(A)", "(B)", ... inserted by the appellant):

- (A) A card (1, 301,401) comprising:*
- (B) a card substrate (10, 410); and*
- (C) a light diffraction layer laminated sheet*
- (D) that is laminated on an upper side of the card substrate (10, 410)*
- (C1) wherein the light diffraction layer laminated sheet comprises:*
- (C2) a transparent sheet layer (20, 220, 320);*
- (C3) a light diffraction layer (22) configured to*
- (C3a) have an outer shape smaller than an outer shape of the transparent sheet layer (20, 220, 320) and*
- (C3b) to be laminated onto an upper side which is one surface side of the transparent sheet layer (20, 220, 320); and*
- (C4) a lower adhesive layer (21) that bonds the transparent sheet layer (20, 220, 320) and the light diffraction layer (22) together,*
- (E) characterized in that the transparent sheet layer (20, 220, 320) and the upper side of the card substrate (10, 410) are laminated to each other directly.*

**Claim 1 of auxiliary request 9** differs from claim 1 of the main request in that the following feature (G) is added at the end of the claim (labelling "(G)" by the board):

*(G) using thermal welding while being heated and pressurized*

**Claim 1 of auxiliary request 3** differs from the main request in that the following features (H) and (I) are added at the end of the claim (labelling "(H)", "(I)" by the board):

(H) , wherein the light diffraction layer laminated sheet further comprises: a print sheet layer (30), which has been undergone printing, configured to be laminated onto the light diffraction layer (22); and an upper adhesive layer (23, 224) that is provided on the light diffraction layer (22), such that the light diffraction layer (22) and the print sheet layer (30) are bonded together, and

(I) wherein the lower adhesive layer (21) and the upper adhesive layer (23, 224) are thermoplastic members, respectively and the upper adhesive layer (23, 224) is configured to have a higher temperature at which adhesiveness thereof appears than a temperature of the lower adhesive layer (21) at which adhesiveness thereof appears

**Claim 1 of auxiliary request 8** differs from claim 1 of the main request in that the following feature (J) is added after feature (C4) and in that the following features (K) and (L) are added at the end of the claim (labelling "(J)", ... by the board):

(J) a print sheet material (30A) comprising a print sheet layer (30) and an upper print layer (31), configured to be laminated onto the light diffraction layer (22),

(K) and the light diffraction layer (22) comprises a Lippmann-type hologram, and wherein

(L) the print sheet layer (30) is completely exposed in a window portion (31g) provided in the upper print layer (31), such that an entirety of an [sic] hologram image (22a) of the Lippmann-type hologram layer (22) is visually recognizable through said window portion 31g [sic]

**Claim 1 of auxiliary requests 11 and 12** differs from claim 1 of auxiliary requests 3 and 8, respectively, in that feature (G) is added after feature (E).

V. **The arguments of the appellant** as far as they are relevant for the decision can be summarised as follows:

- (a) feature (E) ("*... laminated to each other directly*") of claim 1 of the main request lacked literal support in the application as filed;
- (b) feature (E) was disclosed only in the context of feature (G); omitting feature (G) in claim 1 of the main request therefore represented an inadmissible intermediate generalisation;
- (c) feature (G) and its alleged effect was disclosed only in the context of the first embodiment of the patent; however essential features of this embodiment, e.g. shown in Figs. 1A, 1B and 2 and also set out in the description, were not taken up in claim 1 of the main request, also leading to an inadmissible intermediate generalisation;
- (d) the added subject-matter objection also applied to claim 1 of auxiliary request 9;
- (e) auxiliary requests 3 and 8 should not be admitted into the proceedings because they were formally not re-submitted and substantiated with the proprietor's reply to the opponent's statement setting out the grounds of appeal;
- (f) auxiliary requests 11 and 12 were *prima facie* not admissible as they did not overcome all added subject-matter objections against claim 1 of the main request; consequently, they were not admissible under Article 13(2) RPBA in conjunction with Article 13(1) RPBA.

VI. **The arguments of the respondent** as far as they are relevant for the decision can be summarised as follows:

- (a) the application as filed provided proper support for the feature "*laminated to each other directly*" (feature (E)) in view of the entirety of the disclosure, which was to be read with the eyes of the skilled person;
- (b) P1 provided evidence that feature (G) directly and unambiguously ("gold standard") implied feature (E);
- (c) the skilled person derived feature (E) also from all embodiments and all figures which did not disclose any interface layer between the layers laminated together; therefore feature (E) was independent of feature (G);
- (d) auxiliary request 9 contained feature (G), which the opponent argued was inextricably linked to feature (E), and therefore removed the added subject-matter objections;
- (e) auxiliary requests 3 and 8 were to be admitted into the proceedings because neither the opponent's statement setting out the grounds of appeal nor the decision treated these requests; therefore it could not be expected that the respondent substantiated these requests; not admitting such requests might represent a substantial procedural violation;
- (f) auxiliary requests 11 and 12 were a response to the board's preliminary opinion and there had been sufficient time (6 months) to study them; the requests contained those layers which the opponent argued were missing and therefore removed all added subject-matter objections; the exceptional circumstance was the lack of objections against these requests.



## Reasons for the Decision

### 1. The invention as defined by the claims

1.1 A (credit or identity) card with a diffractive layer (hologram) is to be produced cost-effectively (paragraph [0005] of the contested patent), i.e. the manufacturing process is to be simplified.

1.2 This is achieved by laminating (thermally welding) the layer carrying the diffractive structure to a substrate layer while heating and pressurising the layers.

### 2. Articles 100(c) and 123(2) EPC - main request (claims as granted) and auxiliary request 9

2.1 The appellant argued that paragraph [0062] of the impugned patent only mentioned a connection of the substrate and the hologram layer by means of "*thermal welding while being heated and pressurized*":

*The substrate sheet material 10A and the hologram laminated sheet material 20A are laminated to each other using thermal welding while being heated and pressurized. These layers may alternatively be bonded each other [sic] using an adhesive or the like.*

2.1.1 This did not directly and unambiguously disclose that "direct lamination" was performed, i.e. that no intermediate layer such as an adhesive layer was provided. Therefore, undisclosed embodiments were also included in the claimed subject-matter that did not require "thermal welding" and/or an additional substance (adhesive), for example if the substrate sheet material or the hologram laminated sheet material

itself had adhesive properties on the corresponding contact surface or if a solvent was used.

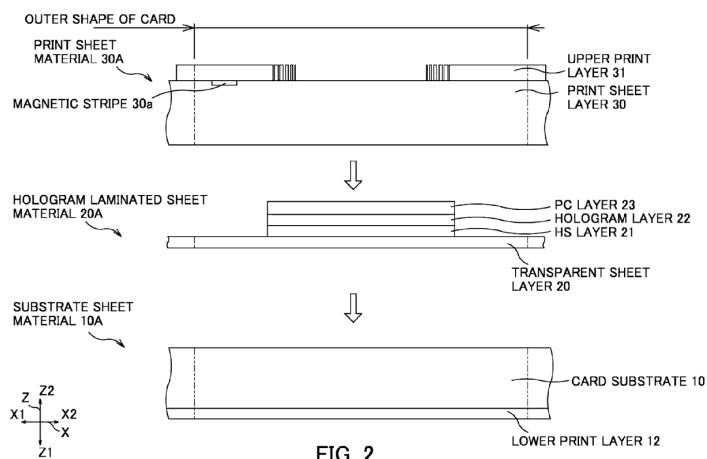


FIG. 2

### Impugned patent

2.1.2 Furthermore, the amendments in claim 1 of the main request and auxiliary request 9 were based on features which were isolated from the very specific context of the embodiment shown in Figs. 1A, 1B and 2. It was clear from the description that all the layers described in connection with the embodiment and shown in these figures were important. There were no embodiments where the PC layer (23), the lower print layer (12) and the upper print layer (31, 331, 431) were not present. The skilled person would understand that in the described method of manufacturing the laminate none of these important features could be omitted. In particular, the PC layer 23 played an important role because the diffractive layer (hologram) had to be protected from the high pressure and temperature used in the thermal welding method (paragraphs [0056] and [0064] of the impugned patent). The skilled person would not omit this layer under any circumstances. Further, there was no disclosure that these layers 12, 23 and 31 could be omitted or replaced

by other layers. Furthermore, there was no disclosure that the feature "*thermal welding while being heated and pressurized*" (feature (G)) could be omitted, either. This feature served allegedly as a basis for "*laminated to each other directly*" but it was in fact not taken up into claim 1 of the main request. Even though it was included in claim 1 of auxiliary request 9, this claim still did not fulfil the requirements of Article 123(2) EPC as there was no direct and unambiguous disclosure that no additional substances were present at the layer interface, nor were the other layers mentioned above included in the claim. In particular the PC layer 23, shown as indispensable, was missing. The essentiality test cited by the respondent was no longer applicable according to the newer case law. Only the so-called "gold standard" was the proper test.

2.1.3 As an alternative to thermal welding, an adhesive was disclosed in the above-mentioned passage. However, this adhesive was not shown in the figures. Consequently, it could not be directly and unambiguously deduced from the figures that an adhesive layer or any other additional layer always had to be absent when thermal welding was used. Consequently, "*laminated to each other directly*" was not directly and unambiguously derivable from the expression "*using thermal welding while being heated and pressurized*" and, if at all, only in connection with feature (G) and with the layers described in Figs. 1A, 1B and 2.

2.2 The respondent argued that in order to assess whether an intermediate generalisation was present, it was important to assess what the skilled person would have understood from the entirety of the disclosure of the application with its common general knowledge. None of

the figures of the patent in suit showed or described an intermediate layer between the substrate and the transparent film layer. P1 disclosed the following (first sentence of section 1.2):

*Thermal welding methods have been defined as the permanent joining of two materials without the use of adhesive or other chemical products at the interface or weld lines [43].*

According to this disclosure the skilled person understood that no such product was used at the interface in the lamination process of the patent "*using thermal welding while being heated and pressurized*", either.

- 2.2.1 The other features of the embodiment of Figs. 1A, 1B and 2 and in particular the other layers were not directly related to the two laminated layers. The usually applied essentiality test implied that the feature "thermal welding" could be isolated from the context of the other features, since in particular the other layers had no influence on the inventive effect to be achieved, namely a simplification of the manufacture process due to the fact that an additional layer could be omitted.
- 2.3 The board notes that according to T 714/00 extracting an isolated feature from an originally disclosed combination and using it for delimiting claimed subject-matter can only be allowable under the concept of Article 123(2) EPC if that feature is not inextricably linked with further features of that combination (T 714/00, Reasons 3.3). An amendment extracting isolated features from a set of features which have originally been disclosed in combination for

an embodiment can only be justified in the absence of any clearly recognisable functional or structural relationship among said features ("Case law of the Boards of Appeal of the EPO" [CLBA], 10<sup>th</sup> edition 2022, section II.E.1.9.1, fourth paragraph).

2.3.1 The board is of the opinion that it is clear from paragraphs [0056] and [0064] of the patent that the PC layer 23 is indispensable for the thermal welding process as it protects the diffractive layer (hologram) from heat and pressure. Therefore the PC layer 23 cannot be omitted from the context of the embodiment of Figures 1A, 1B and 2, in particular provided by features (E) and (G). Its omission amounts therefore to an inadmissible intermediate generalisation.

2.3.2 The board also holds that the absence of an intermediate layer between the layers laminated by thermal welding in the figures of the impugned patent is not a direct and unambiguous disclosure of the general absence of such a layer, since other features mentioned in the description, such as the alternative adhesive layer, are not explicitly shown in the figures, either. On the other hand, the other layers shown in the figures are affected by the thermal welding process, i.e. heat and pressure are exerted on all these layers, so that these layers are affected by the pressure and heat of thermal welding process depending on their composition, thickness and position. This is particularly evident for feature (I), where the upper adhesive layer (PC layer 23) has a higher temperature at which adhesiveness appears than the temperature at which adhesiveness of the lower adhesive layer (21) appears. This suggests that these layers should be included in the claim to avoid an inadmissible intermediate generalisation.

2.3.3 P1 cited by the respondent is a very specific publication and concerns in particular ultrasonic weld technology. Therefore, P1 cannot be taken as evidence of common general knowledge that thermal welding at any pressure and at any temperature does not comprise under any circumstance an additional adhesive, solvent or any other additives. At low pressures or low temperatures, for example, additives may be necessary to ensure reliable welding of the layers.

Therefore, feature (G) does not directly and unambiguously imply feature (E) and, if at all, only in combination with said feature (G). Furthermore, in view of paragraphs [0056] and [0064] of the patent in suit, feature (E) can only be isolated in the context of at least the indispensable PC layer 23. This also applies to claim 1 of auxiliary request 9.

2.3.4 Hence, "directly" in feature (E) cannot be derived directly and unambiguously (i.e. according to the so-called "gold standard") from the originally filed application documents. The inclusion of feature (E) into the broad context of claim 1 of the main request and claim 1 of auxiliary request 9 without also including the other features of the card according to the embodiment of Figs. 1A, 1B and 2, in particular the omission of the PC layer 23, results in an inadmissible intermediate generalization.

2.3.5 On the other hand, feature (E) was used by the patent proprietor to delimit the subject-matter of the patent in suit from the prior art (for example D5, which was assumed to be the closest prior art in the contested decision). Thus, "directly" cannot be deleted without

violating the requirements of Article 123(3) EPC (the so-called "inescapable trap").

2.3.6 Consequently, the subject-matter of claim 1 of the main request and of claim 1 of auxiliary request 9 extends beyond the application as filed (Articles 100(c) and 123(2) EPC).

### **3. Admittance of auxiliary requests 3, 8, 11 and 12**

#### **3.1 Admission of auxiliary requests 3 and 8 under Articles 12(3) to (5) RPBA**

3.1.1 Article 12(3) RPBA stipulates that the statement of the grounds of appeal and the reply shall contain a party's complete appeal case. The submissions shall set out clearly and concisely the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and should specify expressly all the requests, facts, objections, arguments and evidence relied on. The wording of Article 12(1)(c) and 12(3) RPBA leaves no doubt that these provisions are equally applicable to submissions of the appellant and the respondent through the express reference to the reply to the statement of the grounds of appeal. Pursuant to Article 12(5) RPBA the board has discretion not to admit any part of a submission by a party which does not meet the requirements in Article 12(3) RPBA.

3.1.2 In their reply to the statement setting out the grounds of appeal the respondent merely referred to its earlier auxiliary requests and neither explained how they differed from the main request, nor their basis in the application as filed, not even by reference to any earlier submission (see respondent's reply to the appeal dated 27 August 2020, page 14, last paragraph).

In particular, there are no arguments whatsoever why these requests would overcome the objections against the main request as brought forward in the appeal, should this latter not be found allowable.

- 3.1.3 However, should the main request fall, the respondent proprietor must normally request that the decision be set aside and argue why the patent should be maintained in an amended form, i.e. why the decision under appeal should be amended within the meaning of Article 12(3) RPBA.
- 3.1.4 The board is aware that auxiliary requests 3 and 8 were not treated in the decision under appeal, and does not question that these requests would have been found admissible by the opposition division. As such these requests are not amendments within the meaning of Article 12(4) RPBA, first paragraph, first sentence, RPBA. However, it remains that because they were not treated and there are no tangible arguments in the impugned decision why these requests should or should not be held allowable, the board cannot proceed in the usual manner to review the decision under appeal. On the other hand, the board also cannot allow these requests without examining them on their merits. Under these circumstances it is first and foremost the duty of the the proprietor to give reasons how the auxiliary requests would overcome the objections against the main request. Reference is made to the CLBoA, Chapter V.A. 4.2.2.i).
- 3.1.5 It goes without saying that it is also the duty of a diligent opponent to set out all objections against such auxiliary request, either within a time limit foreseen by the RPBA, or at least within a reasonable time after having been notified of these requests,



where the RPBA does not foresee any formal time limit for responding, as in the present case where the lower-ranking undecided requests re-appear in the proceedings only with the reply to an appeal of an opponent. While it is certainly not obligatory to address requests that have not yet been formally filed in the appeal proceedings, diligent opponents are also free to address them pre-emptively in their grounds of appeal. Submitting objections only later, by waiting for the first substantive communication of the board, is going to fall under the provisions of Article 13 RPBA, and must pass a higher hurdle for being admitted.

- 3.1.6 The board also observes that the appellant opponent did not provide any comments on the auxiliary requests in the statement setting out the grounds for appeal. However, this fact alone cannot serve as the board's justification for allowing the auxiliary requests 3 and 8. The board must be convinced that an allowable request fulfils the requirements of the EPC. Given that an auxiliary request becomes relevant where a higher ranking request is not allowable, it is clear that the arguments provided for the higher ranking request cannot be sufficient for allowing the lower ranking request but that something additional is required. Similarly, where a granted independent claim falls, there is of course no longer any automatic assumption that a dependent claim must be allowable, even if it were a granted claim, given that the allowability of dependent claims, typically on novelty and inventive step, regularly derives from the allowability of the corresponding independent claim only. Thus the board is not convinced that the requirements of Article 12(3) RPBA are met by the proprietor's reply to the statement setting out the grounds of appeal in respect of the auxiliary requests 3 and 8.

3.1.7 In view of the above the board does not admit auxiliary requests 3 and 8 under Article 12(3) and (5) RPBA. Reference is made to the Case Law of the Boards of Appeal of the EPO [CLBoA], 10<sup>th</sup> edition 2022, section V.A.4.3.5.

**3.2 Admission of auxiliary requests 3, 8, 11 and 12 under Articles 13(1) and (2) RPBA**

3.2.1 The admission of auxiliary requests 3 and 8 was again requested in response to the board's communication under Article 15(1) RPBA. In this case, the regime of Articles 13(1) and 13(2) RPBA applies. Under Article 13(1) RPBA the requesting party has to demonstrate that the new request, *prima facie*, overcomes the issues raised by another party and does not give rise to new objections.

3.2.2 The board concluded for claim 1 of the main request that "directly" in feature (E) was not directly and unambiguously disclosed in the application documents as originally filed. Auxiliary requests 3, 8, 11 and 12 all contain this feature and consequently all do not *prima facie* fulfil the requirements of Article 123(2) EPC.

3.2.3 The respondent argued that auxiliary requests 3 and 11 also contained PC layer 23, but the board concludes that the feature "directly" is nowhere literally disclosed and is as such neither directly nor unambiguously derivable from the totality of the disclosure. Therefore, this deficiency cannot be "cured" by the inclusion of specific features from the embodiments or figures. In addition, as discussed above, the inclusion of the layers defined in features

(H) and (I) might not be sufficient, since, for example, layers 12 and 31 also play a certain role as outermost layers for the protection of the diffractive layer in the thermal welding process using pressure and heat, since the external pressure and the external heat act on the stack at these layers.

3.2.4 Hence, none of auxiliary requests 3, 8, 11 and 13 can be seen as *prima facie* fulfilling the requirements of Article 123(2) EPC. However, according to Article 13(1) RPBA, *prima facie* allowability is a prerequisite for the admission of auxiliary requests, in particular in the latest stage of the appeal proceedings where Article 13(2) RPBA also applies.

3.2.5 Consequently, auxiliary requests 3, 8, 11 and 12 are not admitted under Articles 13(1) and 13(2) RPBA, as no exceptional circumstances are seen by the board and they *prima facie* do not overcome the objections raised under Article 123(2) EPC.

#### 4. **Summary**

The subject-matter of claim 1 of the main request (patent as granted) and auxiliary request 9 do not fulfil the requirements of Articles 100(c) and 123(2) EPC. Consequently, the decision under appeal has to be set aside. Auxiliary requests 3 and 8 are not admitted into the proceedings under neither under Article 12(3) to (5) RPBA nor under Article 13(1) and (2) RPBA. The auxiliary requests 11 and 12 are not admitted into the proceedings under Article 13(1) and (2) RPBA.

**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. Häusser

Decision electronically authenticated