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**Datasheet for the decision  
of 1 April 2010**

**Case Number:** T 1402/07 - 3.3.09

**Application Number:** 03739752.8

**Publication Number:** 1476300

**IPC:** B32B 17/10

**Language of the proceedings:** EN

**Title of invention:**  
Solar control coating

**Patentee:**  
PPG Industries Ohio, Inc.

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 123(2), 83, 84

**Relevant legal provisions (EPC 1973):**

EPC Art. 54, 56

**Keyword:**

"Amendments - added subject-matter (no)"

"Sufficiency of disclosure (yes)"

"Clarity (yes)"

"Novelty (yes)"

"Inventive step (yes)"

**Decisions cited:**

T 0686/99, T 0475/88

**Catchword:**

-



Case Number: T 1402/07 - 3.3.09

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.09  
of 1 April 2010

**Appellant:** PPG Industries Ohio, Inc.  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office announced orally on  
06.03.07 and issued in writing on 22 March 2007  
refusing European patent application  
No. 03739752.8 pursuant to Article 97(1) EPC  
1973.

**Composition of the Board:**

**Chairman:** W. Sieber  
**Members:** M. O. Müller  
M-B. Tardo-Dino

## Summary of Facts and Submissions

I. European patent application No. 03739752.8, filed on 11 February 2003 as international application PCT/US03/04127 in the name of PPG INDUSTRIES OHIO, INC., and claiming priority from US 60/355,912 (11 February 2002) and US 10/364,089 (11 February 2003), was refused by a decision of the examining division which was announced orally on 6 March 2007 and issued in writing on 22 March 2007. The decision was based on Claims 1 to 22 submitted on 28 February 2007, whereby Claim 1 read as follows:

"1. A transparent substrate, containing a solar control coating, comprising  
a first anti-reflective layer having a thickness of less than 500 Å;  
a first infrared reflective film having a thickness of 50 Å to 150 Å deposited over the first anti-reflective layer;  
a second anti-reflective layer deposited over the first infrared reflective film;  
a second infrared reflective film having a thickness of 50 Å to 150 Å deposited over the second anti-reflective layer;  
a third anti-reflective layer deposited over the second infrared reflective film; and  
a third infrared reflective film having a thickness in the range of 50 Å to 100 Å deposited over the third anti-reflective layer, wherein  
the infrared reflective films include a metal selected from the group consisting of gold, copper, silver, aluminum, or mixtures, alloys, or combinations thereof, preferably silver; and

the anti-reflective layers include at least one material selected from oxides of zinc or tin and oxides containing zinc and tin."

Claim 15 related to a method of coating a transparent substrate, Claim 16 to a coated article and Claim 22 to a method of improving the solar control properties of a coating. The remaining claims were dependent claims directed to elaborations of the subject-matter of Claim 1 and Claim 16, respectively.

II. In the examining division's communications and the decision, the following documents were cited:

D1: US 5,942,338 A;

D2: EP 0 599 071 A1; and

D3: WO 01/38248 A1 (erroneously referred to as "WO01382348" in the decision).

According to the decision, Claim 1 was not clear (Article 84 EPC) and lacked an inventive step (Article 56 EPC).

(a) As regards clarity, it was held that Claim 1 defined the solar coating in such a vague and unclear manner that the alleged technical effect, namely an improved transmission of visible light, was not necessarily obtained by the coatings as defined in the claim. In particular, the thickness of some layers was not specified and the refractive index of all layers was essentially undefined.

Furthermore, there was no support in the description that the specified thicknesses of the infrared reflective films could provide an improved visible light transmission when more than three infrared reflective films were present in the coating.

- (b) As regards inventive step, D1 had to be selected as closest prior art as it disclosed a solar control coating having the general coating structure of Claim 1, eg with three infrared reflective metallic layers (triple stack) and inherently addressed the problem cited in the present application (sufficient transmission in the visible spectral range and sufficient reflectivity in the infrared spectral range). The thickness of the first anti-reflective layer and of the infrared reflective films in the triple stack design mentioned in D1 were not explicitly disclosed in this document. However, a skilled person would easily bridge this gap in information on the basis of its common general knowledge (usual thickness values in this field, eg D3) and could easily obtain suitable thicknesses with standard optimization computer programs for multilayer coatings. Furthermore, the now defined values for the thickness of the layers were not associated with any unexpected technical effect.
- (c) In addition to the objection as to lack of clarity, it was pointed out that there was no guidance in the application as filed as to how the invention could be carried out in coating designs comprising

more than three infrared reflective films. This made it doubtful whether the application met the requirements of Article 83 EPC.

III. With letter of 25 May 2007 the appellant (applicant) filed a notice of appeal against the above decision with simultaneous payment of the prescribed fee. A statement setting out the grounds of appeal and including first and second auxiliary requests was filed on 24 July 2007. Reference was made to

D4: Comparative test data submitted with letter of 6 February 2007.

IV. In a communication dated 10 February 2010, the board gave its preliminary opinion that some of the claims on file appeared to contain deficiencies pursuant to Articles 84 and 123(2) EPC. With regard to inventive step, D3 had to be regarded as the closest prior art. The experimental results in D4 could not prove that any technical effect was obtained by the distinguishing features with regard to D3, so that the objective technical problem had to be formulated in a less ambitious manner as the provision of an alternative transparent substrate containing a solar control coating. The solution to this problem appeared to be an arbitrary variation of the disclosure of D3 and furthermore appeared to be known from D1 and D2.

V. With letter of 1 March 2010, the appellant filed a new main request as well as first and second auxiliary requests together with

D5: Experimental data relating to a comparison of articles comprising two and three silver layers; and

D6: Press release "PPG ships 20 millionth square foot of Solarban 70 XL glass" of 25 February 2009.

VI. With letter of 29 March 2010, the appellant filed

D7: Affidavit by Mr. James P. Thiel

in which the impact of the number and thickness of anti-reflective layers on the optical properties of coatings was discussed.

VII. On 1 April 2010, oral proceedings were held before the board. Following a discussion of the requests on file, the appellant withdrew the main and the two auxiliary requests submitted with the letter of 1 March 2010 and filed a new sole request headed "NEW CLAIMS MAIN REQUEST". Said request contained 15 claims whereby independent Claims 1, 14 and 15 read as follows:

"1. A transparent substrate having a transmittance of visible light with a wavelength in the range of 390 to 800 nm of greater than 0% up to 100% containing a coating, comprising:

a first anti-reflective layer;

a first infrared reflective film having a thickness of  $25 \times 10^{-10} \text{m}$  (Å) to  $300 \times 10^{-10} \text{m}$  (Å) deposited over the first anti-reflective layer;

a second anti-reflective layer deposited over the first infrared reflective film;

a second infrared reflective film having a thickness of

25 x 10<sup>-10</sup>m (Å) to 150 x 10<sup>-10</sup>m (Å) deposited over the second anti-reflective layer;  
a third anti-reflective layer deposited over the second infrared reflective film;  
a third infrared reflective film having a thickness in the range of 50 x 10<sup>-10</sup>m (Å) to 100 x 10<sup>-10</sup>m (Å) deposited over the third anti-reflective layer; and  
a fourth anti-reflective layer deposited over the third infrared reflective film;  
wherein the infrared reflective films include a metal selected from the group consisting of gold, copper, silver, or mixtures, alloys, or combinations thereof;  
and  
the anti-reflective layers include at least one material selected from oxides of zinc or tin and oxides containing zinc and tin, and  
the coating has an a\* and b\* less than or equal to ±|3| and an L\* less than or equal to 50."

"14. A method of coating a transparent substrate having a transmittance of visible light with a wavelength in the range of 390 to 800 nm of greater than 0% up to 100%, comprising the steps of:  
depositing a first anti-reflective layer over at least a portion of the substrate;  
depositing a first infrared reflective film in a thickness of 25 x 10<sup>-10</sup>m (Å) to 300 x 10<sup>-10</sup>m (Å) over the first anti-reflective layer;  
depositing a second anti-reflective layer over the first infrared reflective film;  
depositing a second infrared reflective film in a thickness of 25 x 10<sup>-10</sup>m (Å) to 150 x 10<sup>-10</sup>m (Å) over the second anti-reflective layer;



depositing a third anti-reflective layer over the second infrared reflective film;  
depositing a third infrared reflective film in a thickness in the range of  $50 \times 10^{-10}\text{m}$  (Å) to  $100 \times 10^{-10}\text{m}$  (Å) over the third anti-reflective layer; and  
depositing a fourth anti-reflective layer over the third infrared reflective film;  
wherein the infrared reflective films include a metal selected from the group consisting of gold, copper, silver, aluminum, or mixtures, alloys, or combinations thereof; and  
the anti-reflective layers include at least one material selected from oxides of zinc or tin and oxides containing zinc and tin, and  
the coating has an  $a^*$  and  $b^*$  less than or equal to  $\pm|3|$  and an  $L^*$  less than or equal to 50."

"15. A coated article, comprising a substrate and a coating according to any of Claims 1-13".

Dependent Claims 2-13 were directed to elaborations of the substrate of Claim 1.

Furthermore, amended description pages 1 - 18 were filed during the oral proceedings.

VIII. The appellant's arguments presented orally and in writing can be summarized as follows:

(a) Amendments

Amended Claims 1 and 14 were based on Claims 1 and 35 of the application as filed. As regards the further limitations (thicknesses and metals of the

infrared reflective films, metal oxides of the anti-reflective layers, transparency of the substrate, fourth antireflective layer and colour parameters), the appellant pointed to the relevant passages in the application as filed. The combination of these features could be derived from Figure 1 of the application as filed. Thus, Claims 1 and 14 met the requirements of Article 123(2) EPC.

(b) Sufficiency of disclosure

The skilled person knew how to achieve coatings with colour values as cited in Claims 1 and 14 on the basis of his common general knowledge as represented by D3 and D7. More in particular, the skilled person was aware of the fact that said colour values could be obtained by selecting suitable thicknesses of the infrared reflective films and anti-reflective layers. Furthermore, suitable thicknesses for the various layers would be found by the skilled person on the basis of the thickness ranges disclosed in the application as filed.

(c) Clarity

The examining division failed to provide any evidence in support of the argument that the thickness and refractive index of the various layers must be indicated in order to define the optical properties of the coating, such as transmissivity, absorptivity and reflectivity.

Furthermore, Claim 1 contained all essential features as it defined the number and the thickness of the infrared reflective films.

(d) Inventive step

D3 had to be considered to represent the closest prior art as it related to the same purpose and objective as the present invention. However, D3 did not disclose or suggest the presence of an additional third infrared reflective film and a fourth anti-reflective layer.

The claimed subject-matter aimed at the improvement of visible light transmittance without compromising high infrared reflectance in coatings. D4 and D5 provided evidence that this problem was solved by the claimed subject-matter, and in particular in connection with the features distinguishing the claimed subject-matter from D3. In D4 and D5 triple stack designs with three silver films and four anti-reflective layers according to Claim 1 were compared with double stack designs with two silver films and three anti-reflective layers only. From this comparison it followed that the triple stack coatings were superior to the double stack coatings in that they exhibited a higher transmission of visible light at comparable or slightly improved infrared reflectance.

Neither D3 alone, nor in combination with any of D1 or D2, provided any suggestion to add a third infrared reflective film and a fourth anti-

reflective layer to solve the above problem. Hence, the claimed subject-matter was based on an inventive step.

The presence of an inventive step was further supported by the commercial success of the claimed subject-matter, as documented by D6.

- IX. The appellant requested that the decision under appeal be set aside and the patent be granted on the basis of Claims 1 - 15 of the request filed during the oral proceedings of 1 April 2010 as sole request.

### **Reasons for the Decision**

1. The appeal is admissible.

2. *Amendments*

2.1 Claim 1

2.1.1 A substrate containing a coating as cited in Claim 1 is based on paragraphs [0010] and [0013] and Claim 1 of the application as filed.

The transparency of the substrate is based on paragraph [0014] of the application as filed.

The presence of three infrared reflective films and four anti-reflective layers in alternating sequence in the coating of Claim 1 is based on Claim 19 of the application as filed.

The thickness ranges of the infrared reflective films required in Claim 1 are disclosed in the sixth line of paragraph [0019] (thickness of the first infrared reflective film), in the sixth line of paragraph [0022] (thickness of the second infrared reflective film) and the seventh line of paragraph [0025] (thickness of the third infrared reflective film) of the application as filed.

The metal oxides of the first anti-reflective layer cited in Claim 1 are disclosed in lines 10 - 15 of paragraph [0017] of the application as filed. The metal oxides present in the three further anti-reflective layers of Claim 1 are disclosed in paragraphs [0021], [0024] and [0027] of the application as filed by way of reference to the metal oxides of the first anti-reflective layer.

The metals cited in present Claim 1 for the infrared reflective films are disclosed in Claim 6 as originally filed. A further basis can be found in the fourth and fifth line of paragraph [0019] in conjunction with the second to fifth line of paragraph [0022] and the fourth to sixth line of paragraph [0025] of the application as filed.

Finally, the values cited for the colour parameters  $a^*$ ,  $b^*$  and  $L^*$  in Claim 1 are disclosed in paragraph [0039] of the application as filed.

Consequently, all features of Claim 1 are based on the application as filed.

2.1.2 It remains to be examined whether also the combination of these features has a basis in the application as filed. As set out in decision T 686/99 of 22 January 2003 (point 4.3.3.; not published in OJ EPO), a pointer towards the combination of features is needed in such a situation, because "The content of the application as filed must not be considered as a reservoir from which individual features pertaining to separate sections can be combined in order to create a particular combination". Such a pointer exists in the present case in the form of Figure 1 and its corresponding description in the text as filed. More in particular, Figure 1 describes exactly the arrangement of Claim 1, namely an article comprising a substrate (reference number (12)) together with three infrared reflective films (reference numbers (24), (40) and (58)) and four anti-reflective layers (reference numbers (16), (30), (46) and (66)). Furthermore, the transparency of the substrate in present Claim 1, the colour parameters of the coating as well as all thickness ranges, metals and metal oxides of the films and layers cited in present Claim 1 are disclosed in the description as filed with reference to this figure (see above-cited text passages of the application as filed).

2.1.3 In view of the above, Claim 1 meets the requirements of Article 123(2) EPC.

## 2.2 Claims 2 - 13

The basis of present Claims 2 - 13 which all depend on present Claim 1 is apparent from the table below:

	application as filed
Claim 2	Claim 5
Claim 3	Claim 7
Claim 4	Claim 8
Claim 5	Claim 9
Claim 6	Claim 10
Claim 7	Claims 12 and 15
Claim 8	Claims 13, 16 and 17
Claim 9	Claim 20
Claim 10	Claims 21 and 22
Claim 11	Claim 23
Claim 12	Claim 24
Claim 13	Claim 25

Thus, Claims 2 - 13 meet the requirements of Article 123(2) EPC.

### 2.3 Claim 14

A method of coating a substrate with three infrared reflective films and four anti-reflective layers as cited in Claim 14 is based on Claim 35 in conjunction with Claim 19 of the application as filed. Furthermore, the limitations of amended Claim 1 have been incorporated into Claim 14. As regards these features as well as their combination, the same reasoning as for Claim 1 applies (points 2.1.1 and 2.1.2, above). Consequently, Claim 14 meets the requirements of Article 123(2) EPC.

2.4 Claim 15

Claim 15 is based on Claim 36 as filed, including all the features of amended Claim 1. Consequently, for the same reasons as given with regard to Claim 1, Claim 15 meets the requirements of Article 123(2) EPC.

2.5 In summary, the claims meet the requirements of Article 123(2) EPC.

3. *Sufficiency of disclosure (Article 83 EPC)*

3.1 The examining division argued that in the absence of any guidance in the application as filed, it was doubtful whether the invention could be carried out for coatings comprising more than three infrared reflective films. However, this statement constitutes a mere assumption which was not substantiated by any fact or evidence. Any such unsubstantiated assumption is not suitable to render it credible that the claimed invention cannot be carried out and therefore cannot constitute a valid objection against the grant of a patent based on the present claims.

3.2 The colour parameters  $a^*$ ,  $b^*$  and  $L^*$

The colour values for  $a^*$ ,  $b^*$  and  $L^*$  of the coating required in Claims 1 and 14 represent a result to be achieved. This is confirmed by the affidavit D7 where it is stated that a neutral colour, which translates to the colour values cited in Claims 1 and 14, is "very advantageous, particularly for automotive applications".



As is apparent from page 7, line 7 to page 8, line 5 of D3, the colour of a coating as the present one, ie composed of alternating infrared reflective films and anti-reflective layers, can be controlled by way of adapting the thicknesses of said films and layers. This is further confirmed by the affidavit D7 where it is stated that "the thickness of the anti-reflective layers has a big impact on the color of the article".

The application as filed contains detailed information of how the thicknesses of the infrared reflective films and anti-reflective layers have to be chosen. In this context, reference can be made to the fifth to eighth lines of paragraph [0019], the fifth to seventh lines of paragraph [0022] and the sixth to eighth lines of paragraph [0025] with regard to the thicknesses of the infrared reflective films and the sixth to the ninth lines of paragraph [0018], the second to the fifth lines of paragraphs [0021] and [0024] as well as the second to sixth lines of paragraph [0027] with regard to the thicknesses of the anti-reflective layers (all references to the application as filed). It is thus credible that by choosing the thicknesses of the infrared reflective films and the anti-reflective layers the desired colour values required in Claims 1 and 14 can be obtained by a person skilled in the art. Consequently, the application as filed discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art with regard to the colour values.

- 3.3 As the board sees no further reasons why the claimed invention should be insufficiently disclosed, the requirements of Article 83 EPC are considered to be met.

4. *Clarity (Article 84 EPC)*

4.1 Lack of clarity formed one of the reasons to refuse the present application. In particular, the examining division argued that it formed part of common general knowledge that the effect of improved visible transmission could not be obtained for all coatings encompassed by Claim 1, in particular not for all layer thicknesses, refractive indexes and numbers of layers covered by Claim 1.

However, the examining division failed to provide any details concerning the common general knowledge relied upon or any substantiation, eg in the form of a textbook reference. Thus, this objection cannot form a valid reason for refusal of the application (see for example T 475/88, point 3.1, not published in OJ EPO).

4.2 The examining division's further argument with regard to Article 84 EPC was based on a lack of support of the claimed subject-matter in the description. More in particular, there was no support in the description that the specified thicknesses of the infrared reflective films could provide an improved visible transmission when more than three infrared reflective films were present in the coating.

This argument is based on the same considerations as the examining division's objection as to lack of sufficiency of disclosure (point 3.1 above). Thus, for the same reasons as given above, that argument must fail.

4.3 Furthermore, the claims do not use any term that is vague or unclear. Especially the terms "anti-reflective layer" and "infrared reflective film" are well understood by a person skilled in the art which is clearly reflected by the cited prior art references. None of these references, for example in the broadest definition of the invention, uses a more specific language in order to define the different layers of a solar control coating. On the contrary, Claims 1 and 14 of the application are more specific in that they define the material to be used for the infrared reflective films and the anti-reflective layers as well as the thicknesses of the infrared reflective films.

4.4 Since, furthermore, the description has been brought into line with the amended claims, no objection arises in this context either. Consequently, the application is, in the board's view, devoid of any deficiency under Article 84 EPC.

5. *Novelty*

5.1 Novelty has not been contested in the decision under appeal. Nor does the board see any reason to raise an objection in this context on its own accord as is apparent from the following analysis of the cited prior art.

5.2 D1 discloses a multilayer coating with three anti-reflective layers and two infrared reflective films (column 9, lines 20 - 43, column 10, lines 21 - 48, Claim 7 and Claim 14) as well as a triple stack coating comprising three infrared reflective films (column 5, lines 4 - 8). However, a multilayer coating containing

three infrared reflective films and four anti-reflective layers as required by the independent claims is not disclosed in D1. Nor are the film thicknesses required in the present independent claims disclosed in D1.

5.3 D2 discloses in Claim 18 a glass substrate containing a coating comprising

- an indium tin oxide layer with a thickness of 488 Å (48.8 nm),
- an intermediate silver layer with a thickness of 100 Å (10 nm) and
- a cover layer of indium tin oxide with a thickness of 440 Å (44 nm).

However, a multilayer coating comprising three infrared reflective films and four anti-reflective layers is not disclosed in D2.

5.4 D3 relates to a solar control article comprising a substrate, at least one anti-reflective layer deposited over the substrate, and at least one infrared reflective film deposited over the at least one anti-reflective layer, such that the coated article has a transmittance greater than about 55%, a shading coefficient less than about 0.33 and a reflectance of less than about 30% (Claim 1). Sample 9 in Table I discloses a clear float glass (corresponding to the transparent substrate of Claim 1) containing a coating comprising

- a multilayer zinc oxide and zinc stannate anti-reflective layer (corresponding to the first anti-reflective layer of Claim 1),
- a silver layer with a thickness of 107 Å (corresponding to the first infrared reflective film of Claim 1),
- a multilayer zinc oxide and zinc stannate anti-reflective layer (corresponding to the second anti-reflective layer of Claim 1),
- a silver layer with a thickness of 167 Å (corresponding to an infrared reflective film),  
and
- a multilayer zinc oxide and zinc stannate anti-reflective layer (corresponding to the third anti-reflective layer of Claim 1).

The claimed subject-matter differs from this disclosure (Sample 9) in that the coating according to the present claims comprises (i) a third infrared reflective film having a certain thickness, and (ii) a fourth anti-reflective layer. These features are also not disclosed in the remaining part of D3.

## 6. *Inventive step*

### 6.1 Closest prior art

The present application is directed to coated substrates with improved visible light transmittance without compromising high infrared reflectance,

properties which are particularly required in glass panels for buildings, vehicles and other structures for controlling the amount of solar radiation passing through the panels (paragraphs [0002] and [0004] of the application as filed).

The examining division considered D1 to represent the closest prior art. However, as can be seen in column 2, lines 5 - 11, D1 aims at improving the scratch resistance of multilayer coatings and mainly deals with a so-called MDE layer (mechanical durability enhancing layer). Consequently, D1 is not a suitable starting point for the assessment of inventive step. The board agrees with the appellant that D3 has to be considered as the closest prior art, because it is in the technical field concerned, disclosing technical effects and an intended use most similar to the claimed subject-matter (D3: page 1, lines 11 - 20).

## 6.2 Objective technical problem

6.2.1 The problem relied upon by the appellant in the assessment of inventive step was the problem stated in the application as filed, namely the improvement of visible light transmittance without compromising high infrared reflectance (third paragraph from the bottom of page 3 of the appellant's letter of 1 March 2010; paragraphs [0002] and last sentence of paragraph [0004] of the application as filed). In order to demonstrate that the claimed subject-matter constitutes indeed an improvement over the closest prior art, the appellant relied on the experimental data D4 and D5.

6.2.2 The test report D4 describes two samples, ie Films 1 and 2, the first being according to Claim 1 the second being a comparative film. Film 1 (according to Claim 1) has three infrared reflective films and four anti-reflecting layers, whereas comparative Film 2 has only two infrared reflective films and three anti-reflecting layers, whereby the films had the same total amount of infrared reflective material. Thus, Film 2 is representative for the disclosure of the closest prior art, in particular Sample 9 of Table 1 of D3.

The lower curve in the figure in D4, which represents the data obtained from Film 1, shows the effect referred to by the appellant, ie higher visible light transmittance at approximately the same infrared reflectance.

6.2.3 In D5, Article 1 is compared with Articles 2 and 3. With the exception of the thickness of the third infrared reflective film, Article 1 is according to Claim 1. Article 1 differs from Articles 2 and 3 in the same way as Film 1 from Film 2 in D4, namely three infrared reflective films and four anti-reflecting layers *versus* two infrared reflective films and three anti-reflecting layers.

Compared to Articles 2 and 3, Article 1 has a higher transmittance of visible light at the same or slightly lower transmittance of infrared light (graph on the last page of D5).

6.2.4 In summary, both D4 and D5 demonstrate that the features distinguishing the subject-matter of Claim 1 over the closest prior art, namely presence of three

infrared reflective films and four anti-reflecting layers, are responsible for an improvement of the visible light transmittance without compromising high infrared reflectance. Consequently, the problem relied upon by the appellant is indeed the objective technical problem.

### 6.3 Obviousness of solution

Neither D3 alone nor in combination with D1 or D2 discloses or suggests that the additional presence of a third infrared reflective film and a fourth anti-reflective layer would improve the visible light transmittance of a coating without compromising high infrared reflectance. Consequently, the skilled person reading these documents and being confronted with the objective technical problem would not have arrived at the solution chosen in Claim 1.

Hence, the subject-matter of Claim 1, and by the same token, the subject-matter of Claims 2-15 is based on an inventive step.

### 6.4 Under these circumstances, there is no need to discuss the relevance of the commercial success of the claimed subject-matter allegedly being demonstrated by D6.



## 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 grant the patent in the following version:
  - Description pages 1 - 18 as filed during oral proceedings of 1 April 2010;
  - Claims 1 - 15 (headed "NEW CLAIMS MAIN REQUEST") filed as the sole request during the oral proceedings of 1 April 2010; and
  - Figures 1/2 - 2/2 as originally filed.

The Registrar:

The Chairman:

G. Röhn

W. Sieber