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DECISION of 24 June 2004

Case Number:	т 0327/02 - 3.3.3
Application Number:	93300785.8
Publication Number:	0555069
IPC:	C08F 2/46
Language of the proceedings:	EN

Title of invention: Radiation-curable compositions

Patentee: SERICOL LIMITED

Opponents:

Coates Brothers plc Marabuwerke GmbH & Co. KG A.M. Ramp & Co. GmbH Druckfarbenfabrik

Headword:

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Relevant legal provisions: EPC Art. 83

Keyword: "Disclosure - sufficiency (yes) - undue burden (no) - skilled person"

Decisions cited: G 0001/03, T 0014/83, T 0173/89

Catchword:

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Boards of Appeal

Chambres de recours

Case Number: T 0327/02 - 3.3.3

DECISION of the Technical Board of Appeal 3.3.3 of 24 June 2004

Appellant: (Proprietor of the patent)	SERICOL LIMITED Westwood Road Broadstairs Kent CT10 2PA (GB)
Representative:	Wright, Robert Gordon McRae Elkington and Fife LLP Prospect House 8 Pembroke Road Sevenoaks Kent TN13 1XR (GB)
Respondents: (Opponent I)	Coates Brothers plc Cray Avenue St. Mary Cray Kent BR5 3PP (GB)
Representative:	Whalley, Kevin MARKS & CLERK 57-60 Lincoln's Inn Fields London WC2A 3LS (GB)
(Opponent II)	Marabuwerke GmbH & Co. KG Postfach 152 D-71730 Tamm (DE)
Representative:	Ostertag, Reinhard Patentanwälte Dr Ulrich Ostertag Dr Reinhard Ostertag Eibenweg 10 D-70597 Stuttgart (DE)

- (Opponent III) A.M. Ramp & Co. GmbH Druckfarbenfabrik
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 Patentanwälte
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Decision under appeal: Decision of the Opposition Division of the European Patent Office announced orally on 16 January 2002 and issued in writing on 29 January 2002 revoking European patent No. 0555069 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman:	R.	Young
Members:	P.	Kitzmantel
	Ε.	Dufrasne

Summary of Facts and Submissions

I. Mention of the grant of European patent No. 0 555 069 in respect of European patent application No. 93 300 785.8 in the name of Sericol Limited, which had been filed on 3 February 1993 claiming a GB priority of 7 February 1992, was announced on 13 December 1995 on the basis of 12 claims, independent Claims 1 and 12 reading as follows:

> "1. A radiation curable composition comprising a free radically polymerizable monomer or prepolymer; a different monomer containing an N-vinyl group selected from N-vinyl caprolactam, N-vinyl carbazole, or N,N'divinyl-2-imidazolidone and a pigment."

"12. A method of printing which comprises applying a composition according to any of the preceding claims to a surface of a substrate and exposing the printed ink composition to radiation to effect curing of the composition."

Claims 2 to 11 were dependent on Claim 1.

Notice of Opposition requesting revocation of the patent in its entirety on the grounds of Art. 100(a) and/or (b) EPC was filed by

Coates Brothers plc (Opponent I) on 11 September 1996

Marabuwerke GmbH & Co. KG (Opponent II) on 13 September 1996, and by

A.M.Ramp & Co. GmbH Druckfarbenfabrik (Opponent III) on 13 September 1996.

The oppositions were *inter alia* based on documents D11 (DE-A-3 027 574) and D12 (DE-A-2 441 148).

II. By its decision announced orally on 16 January 2002 and issued in writing on 29 January 2002, the Opposition Division revoked the patent.

> This decision was based on the following Claim 1 submitted as auxiliary request with the letter dated 19 December 2001:

"1. A radiation curable, screen printing ink composition comprising a free radically polymerizable monomer or prepolymer; N-vinyl caprolactam; and a pigment; the composition not including N-vinyl-2pyrrolidone."

It was held in that decision that the patent in suit did not disclose the invention over the whole claimed range in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. It had to be concluded, in the Opposition Division's view, from the various experiments performed by the opponents and on the basis of the information in the patent specification including the skilled person's common general knowledge, that the teaching of the patent could not be implemented. This conclusion even applied to the preferred embodiments according to Examples 1 and 2 of the patent whose repetition by Opponent III with commercially available standard products failed to provide workable screen printing inks. With regard to the issues of novelty and inventive step, which were not part of the decision under appeal, the Opposition Division drew attention to documents D11 and D12 which they considered to be of relevance.

III. On 28 March 2002 the Patentee (Appellant) lodged an appeal against the decision of the Opposition Division and paid the appeal fee on the same day. The Statement of Grounds of Appeal was filed on 7 June 2002.

Further written submissions of the Appellant date from 27 May 2004.

At the oral proceedings held on 24 June 2004 it filed as its sole request an amended set of Claims 1 to 12 whose Claim 1 reads as follows:

"1. A radiation curable, screen printing ink composition comprising a free radically polymerizable monomer or prepolymer; a different monomer containing an N-vinyl group which is N-vinyl caprolactam; and a pigment; the composition not including N-vinyl-2pyrrolidone."

- IV. The arguments of the Appellant submitted in writing and at the oral proceedings may be summarised as follows:
 - (a) Claim 1 as amended according to the aforementioned sole request complied with Article 123(2) and (3) EPC because the (re-)insertion of the words "a different monomer" removed any doubt as to the requirement of the additional presence in the composition of a free

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radically polymerisable monomer (or a prepolymer) other than N-vinyl caprolactam (NVC), and because the desirability of the absence of N-vinyl-2pyrrolidone (NVP) was clearly derivable from the specification (page 3, lines 1 to 5).

- (b) The Opposition Division's conclusion of insufficiency of the claimed invention under Article 83 EPC was, in the Appellant's view, misconceived because it was wrongly based on a comparison of the performance (blocking characteristics) of the claimed NVC-comprising inks with the NVP-comprising inks of the state of the art, an exercise that belonged to the assessment of inventive step under Article 56 EPC and not to that of sufficiency under Article 83 EPC.
- (c) In support of this reasoning the Appellant relied on the third paragraph of section 2.5.2 of G 1/03 from 8 April 2004 (to be published in the OJ EPO) which reads:

"If ... there is lack of reproducibility of the claimed invention, this may become relevant under the requirements of inventive step or sufficiency of disclosure. If an effect is expressed in a claim, there is lack of sufficient disclosure. Otherwise, ie if the effect is not expressed in a claim but is part of the problem to be solved, there is a problem of inventive step ...".

Since, in the present case the achievement of a superior performance of NVC-comprising inks over

NVP-comprising inks was not expressed in Claim 1, it followed, in the Appellant's view, that the assessment of these performance related effects was not a matter of sufficiency under Article 83 EPC.

- (d) With regard to this issue the question was whether, on the basis of the patent's disclosure and considering the skilled person's common general knowledge and abilities, this person was in a position to prepare workable radiationcurable screen printing ink compositions as defined in Claim 1. In the Appellant's view, this was indeed the case.
- (e) The term "screen printing ink compositions" in Claim 1 was undoubtedly only directed to practically feasible compositions; non-workable compositions were thus automatically excluded and the issue of sufficiency of the disclosure would therefore not even arise.
- (f) Moreover, there was enough guidance in the patent specification, eg on page 3, lines 17 to 53, to choose an appropriate binder component even though the "inventive" Examples 1 and 2 only contained the classifying characterisations "aliphatic urethane acrylate" and "Bisphenol A based epoxy acrylate".

The person skilled in the art of screen printing inks was aware of a number of commercial materials which were promising candidates and it did not require undue burden to find out those ones appropriate for the formulation of workable screen printing ink compositions.

In this respect the Appellant referred to the newly cited document P8:

"Chemistry & Technology of UV and EB Formulations for Coatings, Inks and Paints", Vol. II, "Prepolymers & Reactive Diluents for UV and EB curable Formulations", pages 118 to 123 (1991),

as well as to further passages from this textbook.

(g) The partly unsatisfactory results of the repetition of the Examples of the opposed patent by Opponent III (annex II to its submission dated 13 September 1996; hereinafter: "Ramp-report") using Ebecryl®230 as aliphatic urethane acrylate and Ebecryl®600 as epoxy acrylate represented occasional failures which, in accordance with the conclusions of T 14/83 (OJ EPO 1984, 105), were not detrimental to the sufficiency of the patent's disclosure as required by Article 83 EPC; repetitions of the same examples by the other Opponents using different commercial acrylate binders led indeed to workable screen printing inks.

- (h) In judging the compliance with the requirements of Article 83 EPC of the burden involved in reducing the disclosed teaching to practice it had to be kept in mind that the respective practitioner should be skilled in the art of screen printing inks, should be constructive and should formulate the compositions for success not failure.
- V. The Opponents (Respondents) filed the following written submissions:

Opponent I: submissions dated 26 February 2003, 24 May 2004 and 28 May 2004.

Opponent II: submissions dated 27 February 2003 and 21 May 2004.

Opponent III: submission dated 24 May 2004.

- VI. The arguments presented by the Opponents in their written submissions and at the oral proceedings may be summarised as follows:
 - (a) Opponent II denied the compliance of Claim 1 with Article 123(2) EPC because, in its view, the proviso "the composition not including N-vinyl-2pyrrolidone" was not supported by the original disclosure of the opposed patent which allowed for the presence of some amounts of this compound even after curing of the prints.

(b) The decision under appeal should be upheld because it was established by the experimental evidence submitted during the first instance opposition proceedings and supplemented by

Annex A13 "Gutachten des Instituts für Lacke und Farben e.V. Magdeburg" dated 26 February 2003, submitted with Opponent II's letter of 27 February 2003

that, on the basis of the information in the patent specification it was impossible to attain the advantage sought by the claimed invention, i.e. to formulate a screen printing ink composition comprising NVC as reactive diluent which ink composition was superior, especially with regard to its blocking characteristics, to an analogously formulated composition comprising NVP as the reactive diluent.

(c) This was conspicuous in the light of the Rampreport which, in spite of its use of the commercial acrylate materials Ebecryl 230 and Ebecryl 600 in compositions fully corresponding to those of the "inventive" examples of the opposed patent, did not succeed in providing commercially feasible screen printing ink compositions. Moreover, contrary to the assertions of the opposed patent, the Ramp-report showed that NVPcomprising compositions analogous to the "inventive" NVC-comprising compositions provided non-blocking prints.

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- (d) These facts were further supported by the experimental report submitted with Opponent II's submission dated 13 September 1996 which related to tests of four urethane acrylate based inks ("Rezeptur 1 to 4" using Ebecryl 270 or Ebecryl 4858) comprising NVC in amounts corresponding the maximum and minimum amounts according to Claim 3 of the opposed patent and which showed that these compositions could not be considered as workable screen printing inks.
- (e) The inadequacy of these compositions as well as of the one according to "Rezeptur 5" of Opponent II's submission dated 27 August 1998 was summarised in Appendix 1 of attachment A10 (R&D Report of Marabuwerke) of Opponent II's submission dated 14 November 2001; particular emphasis was laid on the unsatisfactory results of Experiment 3 corresponding to said "Rezeptur 5".
- (f) These experimental results demonstrated that, even by following the preferred teaching of the opposed patent, it was not possible to obtain the alleged advantage of better, less blocking screen printing inks; actually, it was not even possible to get commercially feasible screen printing ink compositions. Thus the present situation, differently from that of an "occasional failure" according to T 14/83, was that of "total failure".
- (g) While it was not denied by the Opponents that one could, with considerable effort and expertise far beyond that of an average skilled person, produce

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workable screen printing ink compositions comprising NVC as the reactive diluent, this amounted to undue burden because it required screening tests on the basis of up to 400 commercial radiation curable ink binders, not to speak of the further ingredients of screen printing ink compositions. In an attempt to illustrate the practical difficulties confronting even extremely skilled persons, Opponent II noted that even the use of the allegedly "same" urethane acrylate binder from a different manufacturer has in the past led to unacceptable quality changes of otherwise identical ink compositions.

- (h) In the Opponents' opinion, the achievement of the desired technical effect, i.e. improved blocking characteristics of the NVC-based inks, sought by the alleged invention, as preferably embodied by Examples 1 and 2 of the patent in suit, was subject to the use of an especially designed acrylate binder material which was an undisclosed but essential feature of the claimed subjectmatter.
- (i) The Opponents argued that the achievement of this technical effect was to be considered as an integral part of the "invention" for which patent protection had been granted and that this effect must therefore be taken into account in the assessment of sufficiency of disclosure according to Article 83 EPC notwithstanding that it was not expressed in Claim 1.

VII. The Appellant (Patentee) requested that the decision under appeal be set aside and the patent be maintained on the basis of Claims 1 to 12 filed at the oral proceedings or in the alternative that the case be remitted to the first instance for examination of novelty and inventive step.

> The Respondents (Opponents) requested that the appeal be dismissed or in the alternative that the case be remitted to the first instance for examination of novelty and inventive step.

Reasons for the Decision

- 1. The appeal is admissible.
- 2. Procedural matters

The textbook excerpt P8 submitted with the Statement of Grounds of Appeal and the "Gutachten des Instituts für Lacke und Farben Magdeburg" dated 26 February 2003, submitted as annex A13 of Opponent II's letter dated 27 February 2003 are admitted into the appeal proceedings because both have been filed at its earliest stage and both are relevant to critical issues of the decision under appeal.

3. Article 123(2) and (3) EPC

Claim 1 is supported by Claims 1 and 2 as originally filed and, with regard to the proviso "not including N-vinyl-2-pyrrolidone", by the statement on page 3, first two lines of the last paragraph of the application as filed which, by emphasising the undesirability of the presence of NVP, represents an implicit disclosure of NVP-free compositions.

Owing to these restrictive amendments the scope of operative Claim 1 is narrower than that of its granted version.

Claims 2 to 12 correspond to original Claims 3 to 13 (granted Claims 2 to 12).

Claims 1 to 12 thus meet the requirements of Article 123(2) and (3) EPC.

4. Article 83 EPC (Article 100(b) EPC)

- 4.1 This article requires that the European patent application discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.
- 4.2 From the reference in Article 83 EPC to the person skilled in the art it follows that insufficiency of disclosure cannot be invoked on the basis of information which is not explicitly set out in the specification but is within the common general knowledge and abilities of this person.
- 4.3 In the Board's judgment, this is the situation in the present case; the lack of information from which the specification suffers, especially with regard to the exact chemical and physico-chemical characteristics of the "free radically polymerizable monomer or prepolymer" to be used, is made up by the common

general knowledge and the abilities of the person skilled in the art of screen printing ink compositions and is therefore not detrimental to the sufficiency of the disclosure of the claimed invention.

- 4.4 In accordance with the Guidelines for Examination (Part C, Chapter IV, 9.6) the person skilled in the art is presumed to be an ordinary practitioner aware of what was common general knowledge in the art at the relevant date and who has at his disposal the normal means and capacity for routine work and experimentation. The term "ordinary practitioner" relates, of course, to the respective art, i.e. in the present case to the art of formulating screen printing ink compositions. This involves *inter alia* knowledge of the technical requirements to be met by such compositions, of the ingredients used and their contribution to the fulfilment of the afore-mentioned requirements as well as manufacturing and application experience.
- 4.5 In view of this knowledge and these abilities the skilled person is in a position to carry out the claimed invention without undue burden.

Contrary to the contentions of the Opponents, the word "invention" in this context relates to the subjectmatter specified in Claim 1 and does not comprise any performance related features other than those inherent to the term "radiation curable screen printing ink composition"; in particular, it does not require this ink composition to be better than ink compositions of the state of the art which comprise NVP, eg with regard to the blocking characteristics of the resulting prints, notwithstanding that this improvement is set out in the specification of the opposed patent to be in the focus of the claimed invention.

This interpretation of the word "invention" as it is used in Article 83 EPC conforms to the conclusions of the Enlarged Board of Appeal in G 1/03 referred to in section IV(c) above.

It is furthermore supported by Rule 29(1) EPC according to which the "claims shall define the matter for which protection is sought in terms of the technical features of the invention" and is also consistent with the use of the word "invention" in Article 56 EPC which establishes that an "invention shall be considered as involving an inventive step ... if ... it is non obvious ...", dissociating thereby the word "invention" from the requirements of inventivity i.e. the successful solution of an underlying technical problem.

Moreover if the Opponents' reasoning were to be followed, ie that desired technical effects which are not reflected by the wording of a claim should be taken into account for the assessment of the fulfilment of the requirements of Article 83 EPC, this would lead to confusion with the requirements of Article 56 EPC.

4.6 The Board's conclusion that no undue burden is required by the skilled person to carry out the claimed invention is based on the evidence on file, discussed below, which demonstrates that - on the basis of the information in the patent specification and of its common general knowledge and abilities - an ordinary practitioner was in a position to prepare workable screen printing ink compositions with a reasonable degree of trial and error experimentation. This conclusion applies in particular to the choice of the "free radically polymerizable monomer or prepolymer" of Claim 1 and especially of the aliphatic urethane acrylate and the epoxy acrylate employed according to Examples 1 and 2 of the opposed patent.

The Board stresses in this context that there is no obligation under the EPC for an applicant/patentee to disclose the best mode for carrying out the invention and that the Opponents' respective complaint is therefore ill conceived.

- 4.7 Experimental evidence concerning Examples 1 and 2 of the patent in suit:
 - (a) Example 1 concerns an "inventive" ink composition based on an unidentified aliphatic urethane acrylate, Example 2 one based on an unidentified bisphenol A based epoxy acrylate. Cured prints (UV lamp 80 W/cm) on PVC (polyvinylchloride) exhibited low blocking between the stacked sheets and no signs of damage after separation.
 - (b) Repetition of the "inventive" Examples 1 and 2 by Opponent III's Ramp-report using the commercial acrylate materials Ebecryl 230 and 600 led to the following results: prints on rigid and soft PVC sheets exhibited only little ("leichtes") blocking but incomplete curing even at high UV dose (120 W/cm; low belt speed 10 m/min).

- (c) Repetition of the "inventive" Example 1 according to "Coates Screen R&D Report" of 28 November 1998, filed with Opponent I's submission dated 1 December 1998 using the aliphatic urethane acrylate Actilane® 210TP30 led to the following results: prints on rigid and s/a (self adhesive) PVC: good scratch, #hatch tape and solvent rub performance at high UV dose, getting worse at lower UV doses; no blocking or surface marking at high UV dose (2x20 m/min belt speed), results between "no blocking" and "slight sticking" at lower UV dose (40 m/min belt speed) (Results Tables I and II).
- (d) Repetition of the "inventive" Example 2 according to "Coates Screen Development, Report Number 576" from 26 October 2001, filed with Opponent I's submission dated 15 November 2001 using the epoxy acrylate Ebecryl 600 (Appendix D, Experiment 4, ink 1, sample P3A) led to the following results: poor adhesion on PC sheets and freshly spin coated CDs (page 6); no blocking of prints in both cases at different conditions (UV dose/belt speed; I:I (ink/ink) and I:S (ink/substrate); single and double ink layer).
- (e) Repetition of the "inventive" Examples 1 and 2 by PIRA's "Technical services report" filed with Opponent I's submission dated 15 November 2001 using unidentified commercial acrylate materials led to the following results: the prints on four different PVC sheets at different conditions (UV dose/belt speed; 1 or 2 UV lamps; I:I (ink/ink) and I:S (ink/substrate); single and double ink

layer) all exhibited little or no tendency to block and no signs of damage (pages 12, 15, 18, 21; page 6, penultimate paragraph).

- (f) Repetitions of the "inventive" Examples 1 and 2 according to the "Gutachten" (expert opinion) of the "Institut für Lacke und Farben e.V. Magdeburg" of 26 February 2003 filed with Opponent II's submission dated 27 February 2003 using the aliphatic urethane acrylate Craynor® CN910A70 ("Rezeptur Ia") or the epoxy acrylate Ebecryl 605 ("Rezeptur IIa") led to the following results: the tests prints on three different PVC sheets at different conditions (UV dose/belt speed; 1 or 2 UV lamps; I:I (ink/ink) and I:S (ink/substrate); single and double ink layer) all exhibited little or no tendency to block (pages 10 to 12; summary on page 13); the #hatch ("Gitterschnitt) test" showed good PVC-adhesion for "Rezeptur Ia", but bad PVC-adhesion for "Rezeptur IIa" (pages 16 to 19).
- 4.8 It follows from this synopsis that the various repetitions of "inventive" Examples 1 and 2 by the Opponents all essentially confirm the possibility to obtain low- or non-blocking prints with commercially available acrylate binders for screen printing ink compositions.

It is telling in this context that Opponent I in its submission dated 15 November 2001 concludes "... a properly formulated ink will not block whether it contains NVP or NVC" and "[t]he only conclusion we are able to draw ... is that the alleged problem (blocking when using NVP) does not exist when a printing ink is properly formulated and that, if the problem does exist (because the printing ink has been badly formulated), the alleged invention does not provide a solution" (page 6, paragraph 5.1, first sentence and paragraph 5.3).

4.9 The achievement of satisfactory blocking results is even reported for the repetitions according to Opponent III's Ramp-report, which however also mentions that the prints suffered from incomplete curing. In contrast thereto, this curing defect is not reported for Opponent I's repetition of Example 1 at reasonably high UV doses ("Coates Screen R&D Report", cf 4.7 (c) above), nor for the repetition of Examples 1 and 2 by PIRA (cf 4.7 (e) above) and by the "Institut für Lacke und Farben" commissioned by Opponent II (cf 4.7 (f) above).

> It follows that the curing problems shown by the Rampreport are not due to a fundamental deficiency of the compositions of "inventive" Examples 1 and 2 but are rather to be qualified as occasional failures which can be avoided by appropriate measures of a skilled person (T 14/83).

4.10 While it cannot thus be denied that the preparation of "inventive" ink compositions which render non-blocking prints was within the ambit of the skilled person's knowledge, the Opponents' experiments show that prints from compositions according to "inventive" Example 2 suffered from poor adhesion to PC ("Coates Screen R&D Report", page 3, "experiment 4" [cf 4.7 (c) above]; PIRA report, paragraph bridging pages 6 and 7 [cf 4.7 (e) above]). Similarly the report from the "Institut für Lacke und Farben" exhibits bad adhesion to PVC (cf 4.7 (f) above), a result that is however contradicted by the PIRA report which performed its blocking tests on vinyl substrates because of the poor adhesion to PC.

However, overcoming these difficulties seems to be a matter of routine adjustments for the skilled person as suggested by the seemingly diverging afore-mentioned PVC-adhesion results reported for these compositions by PIRA and by the "Institut für Lacke und Farben" as well as by the "R&D Report of Marabuwerke" filed with Opponent II's submission dated 14 November 2001 which shows that by changing the type of aliphatic urethane acrylate (from Ebecryl 270 to Ebecryl 4858) it was possible to convert bad adhesion and severe blocking into good/fair adhesion and fair blocking, a success which is all the more important as it was stated by Opponent II at the oral proceedings that the "pigment green 7" used in these experiments is strongly UVabsorbing and thus difficult to harden (page 10, Appendix 1, experiments 1 & 3 versus experiments 4 & 6).

The fact that an appropriate choice of the raw materials is a routine task of the skilled person is confirmed by the following statement in Opponent I's submission dated 15 November 2001: "... Opponent I, after consultation with raw material suppliers, used their experience of what would be typically used in their industry to repeat the experiments and achieve results that would be obtained by the skilled person on the basis of this experience and the information in the patent in suit" (page 6, section 4.4.1). 4.11 In the Board's judgment, it is therefore justified to conclude that the expert skilled in the formulation of screen printing ink compositions is able without undue burden to provide over the whole claimed range screen printing ink compositions which are "fit for the purpose".

> As shown by the Opponents' experiments, the skilled person is aware of the general compositional requirements of workable screen printing inks including feasible binder materials like those comprised by the list of commercially available aliphatic urethane acrylates in Table XVIII of document P8. The Opponents argument that there were up to 400 binder materials for screen printing inks on the market and that the skilled person was therefore confronted with an enormous screening task is effectively contradicted by the - to a high degree successful - repetition of the "inventive" Examples 1 and 2 and by the demonstration of turning failure into success by the change of commercial acrylate binders according to Appendix 1 of the afore-mentioned "R&D Report of Marabuwerke" (cf previous section).

4.12 This conclusion is not invalidated by the fact that some of the compositions which come under the very broad scope of Claim 1 do not fulfil the requirements of a workable screen printing ink composition as established by the experiments filed by Opponent II with its submissions dated 13 September 1996 ("Rezepturen 1 to 4") and dated 27 August 1998 ("Rezeptur 5"). On the one hand it is open to doubt whether the skilled person poised for success, i.e. eager to formulate workable screen printing ink compositions, would consider these recipes which use NVC in amounts which correspond to the maximum (40%) or the minimum (3%) suggested by granted Claim 3, which - differently from the additional presence of a di- and a tri-acrylate in the composition of "inventive" Example 1 - use an aliphatic urethane acrylate as the sole acrylate source, and which - in lieu of carbon black - employ the highly UV absorbing pigment green 7.

On the other hand even if the skilled person had considered these compositions and had thus encountered failure, this occasional lack of success (cf T 14/83) could be cured by a reasonable amount of trial and error experimentation (cf T 173/89 from 29 August 1990, Reasons 4.3) because the person skilled in the art of screen printing ink compositions can be assumed to be familiar with the impact conventional ingredients have on the overall properties of the compositions and are thus able to direct experimentation towards success.

Opponent II's remark that the mere change of the urethane acrylate supplier (cf section VI(g) above) may in industrial practice cause severe quality problems highlights the difficulties to exhaustively define the necessary characteristics of the ink ingredients and the requirement to rely on the skilled person's knowledge and abilities.

4.13 The Opposition Division's conclusion of non-compliance of the claimed subject-matter with the requirements of Article 83 EPC cannot therefore be upheld.

- 5. Since the decision under appeal is confined to the issue of sufficiency under Article 83 EPC and since all parties requested that the case should be remitted to the first instance in the event that the Board eventually accepted the Appellant's arguments in this respect, the Board, in the application of its power under Article 111(1) EPC, decides to remit the case to the first instance.
- 6. It is noted by the Board that, contrary to the situation regarding the issue of sufficiency, the assessment of inventive step of the claimed subjectmatter has to consider whether the underlying technical problem has been solved by the invention (cf G 1/03 as quoted in section VI(c) above).

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the first instance for further prosecution on the basis of Claims 1 to 12 filed at the oral proceedings.

The Registrar:

The Chairman:

E. Görgmaier