

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte  
Reinhard Langer and Alexander Klausener

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Appeal No. 2004-1590  
Application 10/009,699

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ON BRIEF

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Before GARRIS, DELMENDO and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 11 through 24.

Claims 11 and 17 are representative of the subject matter on appeal. A copy of claim 11 is set forth in the attached appendix.

Claims 11 through 16 stand rejected under 35 U.S.C. § 103 as being obvious over Handrick.

Claim 17 through 24 stands rejected under 35 U.S.C. § 103 as being obvious over Ogilvie in view of Handrick.

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The examiner relies on the following references as evidence of unpatentability:

|                            |           |               |
|----------------------------|-----------|---------------|
| Ogilvie                    | 2,387,341 | Oct. 23, 1945 |
| Handrick et al. (Handrick) | 3,979,448 | Sep. 07, 1976 |

### OPINION

I. The 35 U.S.C. § 103 rejection of claims 11 through 16 as being unpatentable over Handrick

On page 5 of the brief, appellants argue that their claimed process is carried out using a maximum weight of ratio of nitric acid to substrate of about 37:1. Appellants calculate this ratio by allowing for appellants' minimum specified molar quantity of the substrate having the lowest molecular weight (which is the claimed 2-fluoro-6-nitrobenzyl alcohol having a molecular weight of 171 g/mol), with appellants' maximum specified amount of nitric acid, which is 10 mol.

Appellants state that, to the contrary, Handrick teaches a weight ratio of nitric acid to aromatic starting material of at least 50:1, with a preference of even higher ratios of 100:1 to 200:1, and refers to column 3, lines 28 to 33 of Handrick.

Appellants also argue the differences between the concentration of nitric acid that is used in Handrick versus that required by the claim. For example, appellants state that Handrick teaches a concentration of 2% to no more than 14%. Appellants' claim recites "nitric acid comprising between 35 and 90% by weight water". Brief, page 5.

At the top of page 4 of the answer, the examiner asserts that the nitric acid concentration and molar ratio of nitric acid to aromatic compound of Handrick overlaps that claimed by appellants, and refers to column 3, lines 52 through 56 of

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Handrick. The examiner then states that where there are any differences between (1) the nitric acid concentration, and (2) molar ratio of nitric acid to aromatic compound, such differences are deemed obvious unless there is evidence indicating such concentration is critical, and cites In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Answer, page 4. We cannot find in the answer, any rebuttal by the examiner regarding appellants' discussion of the maximum weight ratio of nitric acid to substrate of 37:1, as compared with the ratio of at least 50:1, as set forth in Handrick.

The initial burden of presenting a prima facie case of obviousness rests on the examiner. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). In the instant case, the examiner has not explained how Handrick's ratio values (regarding nitric acid to substrate) in fact overlap that claimed by appellants. The examiner refers to column 3, lines 52-56 of Handrick, but does not explain how such disclosure teaches an overlap of the ratio required by claim 11.

With regard to the concentration of nitric acid, the examiner again relies upon the disclosure at column 3, lines 52-56 of Handrick, but does not explain how the disclosure teaches an overlap of the concentration of the values set forth in claim 11.

In view of the above, we determine that the examiner has incorrectly applied the rationale in In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). While it may ordinarily be the case that the determination of optimum values for the parameters of a prior art process would be at least prima facie obvious, that conclusion depends upon what the prior art discloses with respect to those parameters. See In re Antonie, 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977). Compare In re Sebek, 465 F.2d 904, 907, 175 USPQ 93, 95 (CCPA 1972) ("Where, as

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here, the prior art disclosure suggests the outer limits of the range of suitable values, and that the optimum resides within that range, and where there are indications elsewhere that in fact the optimum should be sought within that range, the determination of optimum values outside that range may not be obvious." ). Here, the examiner does not provide a specific explanation of any overlap. Also, appellants explain how their claimed ratio and concentration are not close to the teachings of Handrick. Accordingly, we determine that the examiner has not set forth a prima facie case.

In view of the above, we reverse this rejection.

II. The 35 U.S.C. § 103 rejection of claims 17 through 24 as being obvious over Ogilvie in view of Handrick

Also, beginning on page 6 of the brief, appellants argue that in view of Handrick's failure to suggest appellants' claimed process (as discussed previously in connection with the aforementioned rejection), appellants submit that Ogilvie in view of Handrick does not suggest the claimed invention.

Hence, for the same reasons that we reversed the aforementioned rejection, we reverse this rejection also. Ogilvie does not cure the deficiencies of Handrick.

We need not address issues of rebuttal evidence (as discussed, for example, by appellants on page 7 of the brief) in light of our determination that the examiner has not set forth a prima facie case of obviousness.

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III. Conclusion

Each of the rejections is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR 1.136(a).

REVERSED

|                             |   |                 |
|-----------------------------|---|-----------------|
| BRADLEY R. GARRIS           | ) |                 |
| Administrative Patent Judge | ) |                 |
|                             | ) |                 |
|                             | ) |                 |
|                             | ) |                 |
| ROMULO H. DELMENDO          | ) | BOARD OF PATENT |
| Administrative Patent Judge | ) | APPEALS AND     |
|                             | ) | INTERFERENCES   |
|                             | ) |                 |
|                             | ) |                 |
| BEVERLY A. PAWLIKOWSKI      | ) |                 |
| Administrative Patent Judge | ) |                 |

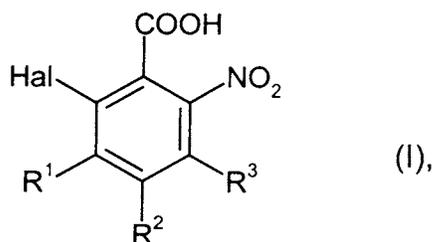
BAP/vsh

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LANXESS CORPORATION  
PATENT DEPARTMENT/ BLDG 14  
100 BAYER ROAD  
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Appendix  
Claim 11

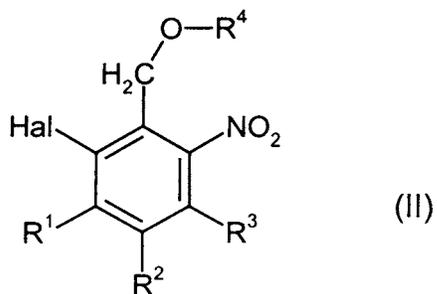
11. A process for the preparation of 2-halo-6-nitrobenzoic acids of formula (I)



wherein

R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup>, independently of one another, are hydrogen, fluorine, chlorine, bromine, nitro, or carboxyl, and

Hal is fluorine, chlorine, or bromine, comprising heating a 2-halo-6-nitrobenzyl alcohol, ester, or ether of formula (II) or a mixture thereof,



wherein

R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup>, and Hal have the meanings given above for formula (I), and

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R<sup>4</sup> is hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-carbonylalkyl, or 2-halo-6-nitrobenzyl, in the presence of between 1 and 10 mol, per mole of alcohol, ester, or ether of formula (II), of nitric acid comprising between 35 and 90% by weight of water at a temperature between 50 and 200°C.