DE C I S I O N
of 28 February 2001

Case Number: T 0653/98 - 3.3.1
Application Number: 93917923.0
Publication Number: 0652858
IPC: C07C 17/10
Language of the proceedings: EN

Title of invention:
Process for the preparation of 1,1,1-trichloro-2,2,2-trifluoroethane

Applicant:
Syngenta Limited

Opponent:
-

Headword:
Trifluoroethane/SYNGENTA

Relevant legal provisions:
EPC Art. 54(2)

Keyword:
"Novelty (yes) - multiple selection"

Decisions cited:
T 0653/93

Catchword:
-
Case Number: T 0653/98 - 3.3.1

DEcision
of the Technical Board of Appeal 3.3.1
of 28 February 2001

Appellant: Syngenta Limited
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Representative: Richard Waterman
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 17 February 1998 refusing European patent application No. 93 917 923.0 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: A. J. Nuss
Members: P. P. Bracke
R. Menapace
Summary of Facts and Submissions


The application as filed consisted of 13 claims with the only independent claim reading:

"1. A process for the preparation of 1,1,1-trichlorotrifluoroethane in which 1-chloro-2,2,2-trifluoroethane is subjected to chlorination by bringing the 1-chloro-2,2,2-trifluoroethane into contact with chlorine within a reaction vessel characterised in that the process is conducted in the liquid phase in the presence of a chemical free radical initiator under a pressure of from 1 to 20 bar and at a temperature within the range 50 to 120°C, and the product is separated from the reaction mixture by fractional distillation."

II. The decision under appeal was based on the following claims and description: Claims 1 to 13 filed with letter of 5 November 1996 (received 7 November 1996); pages 1, 2, 5 and 6 as originally filed and pages 3 and 4 annexed to the International Preliminary Examination Report.

III. The Appellant argued that the process of Claim 1 was novel as it referred to a combination of two process features with selected ranges, which combination was not disclosed in document (1).
IV. The Appellant requested with telefax of 19 February 2001, as a main request, that the decision under appeal be set aside and a patent be granted on the basis of the claims as originally filed.

Reasons for the Decision

1. The appeal is admissible.

2. Novelty

2.1 The Examining Division was of the opinion that document (1) was novelty destroying for the claimed process, since all parameters of the presently claimed process were disclosed therein. In particular, the Examining Division argued that the temperature and pressure values according to the claimed process overlap with the temperature values (100 to 120°C) and the pressure values (10 to 20 bar) disclosed in document (1).

2.2 Document (1) discloses a process for preparing 1,1-dichloro-2,2,2-trifluoroethane by chlorinating 1-chloro-2,2,2-trifluoroethane, in which 1,1,1-trichlorotrifluoroethane is obtained as by-product and 1,1-dichloro-2,2,2-trifluoroethane is separated from the reaction mixture by fractional distillation (page 2, lines 34 to 36, 42 and 43 and page 3, lines 24 to 26). Furthermore, it teaches that the process may be initiated with chemical initiators and that, in the case of chemical initiation, the process is conducted in liquid phase at a pressure from 10 to 400 bar and a temperature of 100 to 300°C, preferably of 150 to 250°C (page 2, lines 49 to 52, and page 3, lines 7 to 9). None of the examples concerns a process at a pressure...
below 50 bar and/or at a temperature below 180°C.

2.3 However, the question of novelty cannot be answered by contemplating the ranges of the various parameters – in the present case: the ranges of the pressure and the temperature – separately. This would be an artificial and unjustified approach, since the process claimed in the application under examination is not directed to the specified ranges of pressure and temperature in isolation but to the combination of all specified process parameters, including the range of temperature and the pressure range (see T 653/93, point 3.2.1 of the reasons for the decision).

2.4 It follows from points 2.2 and 2.3 that there is no teaching in document (1) to conduct the process described therein at a pressure of from 1 to 20 bar while keeping the temperature within the range of 50 to 120°C, as now claimed.

2.5 Consequently, contrary to the finding in the decision under appeal, the claimed process could not be immediately and unambiguously derived from document (1) and, therefore it is novel over the teaching of document (1).

3. In view of the above, there is no need to consider the auxiliary requests.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The matter is remitted to the first instance for further prosecution on the basis of Claims 1 to 13 as filed.

The Registrar:                           The Chairman:

N. Maslin                                A. Nuss