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**D E C I S I O N**  
**of 27 June 2001**

**Case Number:** W 0005/01 - 3.2.5

**Application Number:** PCT/US 99/24307

**Publication Number:** -

**IPC:** -

**Language of the proceedings:** EN

**Title of invention:**

Single Extruder Screw for Efficient Blending of Miscible  
Immiscible Polymeric Materials

**Applicant:**

GENERAL ELECTRIC COMPANY

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 155(3), 34(3)(a)  
PCT R. 68.3(e), 68.2, 13.1, 13.2

**Keyword:**

"Lack of unity of invention a priori (yes)"

**Decisions cited:**

G 0002/89, W 0009/94, W 0003/94

**Catchword:**

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**Case Number:** W 0005/01 - 3.2.5  
**International Application No.** PCT/US 99/24307

**D E C I S I O N**  
**of the Technical Board of Appeal 3.2.5**  
**of 27 June 2001**

**Applicant:** GENERAL ELECTRIC COMPANY  
One River Road  
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NY 12345 (US)

**Representative:** Bernard Snyder  
GENERAL ELECTRIC COMPANY  
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**Subject of the Decision:** Protest according to Rule 68.3(c) of the Patent Cooperation Treaty made by the applicant against the invitation of the European Patent Office (International Preliminary Examining Authority) to restrict the claims or pay additional fees dated 25 September 2000.

**Composition of the Board:**

**Chairman:** W. Moser  
**Members:** P. Michel  
W. Zellhuber

## Summary of Facts and Submissions

- I. International patent application PCT/US 99/24307 was filed with the USPTO on 18 October 1999.
- II. On 25 September 2000, the European Patent Office (EPO), in its capacity as International Preliminary Examination Authority (IPEA), indicated that it considered that there are two inventions claimed in the international application, and invited the applicant to restrict the claims or to pay an additional fee.
- III. In the invitation, the IPEA argued that the claims included two groups of inventions not so linked as to form a single inventive concept as required by Rule 13.1 PCT.

The first group comprises independent claims 1 and 3 and dependent claims 2 and 4 to 13. Claims 1 and 3 read as follows:

"1. A single screw extruder for dispersive and distributive mixing, said extruder comprising:  
a screw having a continuous flight thereon which defines a channel having a width and a height;  
a plurality of baffles disposed in said channel in a predetermined pattern."

"3. A single screw extruder for dispersive and distributive mixing, said extruder comprising:  
a screw having a length, said screw including a first metering stage and a second metering stage thereon;

a first continuous flight having a height and a width disposed in said first metering stage which defines a first channel and having a plurality of first baffles disposed therein in a first predetermined pattern; and

a second continuous flight having a height and a width disposed in said second metering stage which defines a second channel and having a plurality of second baffles disposed therein in a second predetermined pattern."

The second group comprises independent claim 14 and dependent claims 15 to 17. Claim 14 reads as follows:

"14. A mixing feature for a single screw extruder comprising a blister ring positioned on said screw having a plurality of slots and lands disposed thereon."

It was argued that the only technical feature common to both groups of inventions is a single screw extruder and that single screw extruders are generally known as exemplified by US-A-4 074 362.

- IV. The applicant paid the additional fee under protest in accordance with Rule 68.3(c) PCT on 23 October 2000. It was accepted that, whilst it may be true that the only technical feature common to both groups of inventions is a single screw extruder, it was pointed out that the additional feature of claim 14, the sole independent claim of the second group of inventions, is also a feature of claim 4, a dependent claim belonging to the first group of inventions. It thus did not require any additional search to search the second group of inventions. This was further seen as an indication that

only one inventive concept was present.

- V. An invitation to pay the protest fee was issued on 6 December 2000, in which the review panel confirmed the finding expressed in the communication of 25 September 2000, indicating in their reasons that the question of an additional search is irrelevant to the question of unity of invention.
  
- VI. The applicant paid the protest fee on 5 January 2001. An amended set of claims was also filed. No further reasoning has been received from the applicant.

### **Reasons for the Decision**

- 1. The protest is admissible.
  
- 2.1 The sole feature of claim 14 is that the screw has positioned thereon a blister ring "having a plurality of slots and lands disposed thereon". This feature is absent from claims 1 and 3. Thus, as accepted by the applicant in the response of 23 October 2000, the only technical feature common to the independent claims of both groups of inventions is a single screw extruder. Single screw extruders are, however, generally known as exemplified by US-A-4 074 362. There is no technical relationship involving one or more of the special technical features of claims 1 and 3 on the one hand, that is, "a screw having a continuous flight thereon which defines a channel having a width and a height; a plurality of baffles disposed in said channel in a predetermined pattern" and those of claim 14 on the other hand, as required by Rule 13.2 PCT.

- 2.2 The fact that the additional feature of claim 14, the sole independent claim of the second group of inventions, is also a feature of claim 4 is not relevant to the question of whether or not the two groups of inventions as set out in paragraph III above are so linked as to form a single inventive concept. Indeed, the fact that the feature of claim 14 appears in claim 4, which is appendant to independent claim 3, only emphasises that this feature is not an essential feature of the screw extruder of claim 3.
- 2.3 Further, the allegation that, when the search was carried out, no additional search would have been required, cannot constitute a reason for contesting a finding of lack of unity by the IPEA (see W 9/94). It may also be noted that the EPO, when acting as ISA, did not raise an objection of lack of unity (see search report of 11 February 2000) and did not request an additional search fee. Whilst the requirement of unity of invention must be judged by both the ISA and the IPEA by the same objective criteria, the decision of the ISA is not binding on the IPEA, as stated in G 2/89 (OJ EPO 1991, 166), points 8.1 and 8.2 of the reasons.
3. The Board has no power to examine the question of unity of invention of the additional set of claims. Its powers derive from Article 155(3) EPC which provides for it to examine a protest which arises out of Rule 68.3(e) PCT. This it can only do on the basis of the documents available when the IPEA issued its invitation either to restrict the claims or to pay the protest fee within a period of one month (see W 3/94). Since, in the present case, the applicant elected to pay the protest fee, the Board must confine its decision to the set of claims considered by the IPEA.

4. For the foregoing reasons, the Board comes to the conclusion that the two groups of inventions as set out in paragraph III above are not so linked as to form a single inventive concept as required by Rule 13.1 PCT. The invitation under Article 34(3)(a) and Rule 68.2 PCT was therefore justified.

## **Order**

### **For these reasons it is decided that:**

The protest according to Rule 68.3(c) PCT is dismissed.

The Registrar:

The Chairman:

M. Dainese

W. Moser