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**D E C I S I O N**  
of 21 April 1998

**Case Number:** T 0295/97 - 3.2.1

**Application Number:** 90313111.8

**Publication Number:** 0431873

**IPC:** B67D 5/64, B67D 5/32

**Language of the proceedings:** EN

**Title of invention:**  
Fuel dispenser

**Patentee:**  
Gilbarco Inc.

**Opponent:**  
Dresser Europe S.A.

**Headword:**  
-

**Relevant legal provisions:**  
EPC Art. 56

**Keyword:**  
"Inventive step (yes)"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 0295/97 - 3.2.1

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.1  
of 21 April 1998

**Appellant:**  
(Opponent)

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**Representative:**

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**Respondent:**  
(Proprietor of the patent)

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**Representative:**

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**Decision under appeal:**

Decision of the Opposition Division of the  
European Patent Office posted 17 February 1997  
rejecting the opposition filed against European  
patent No. 0 431 873 pursuant to Article 102(2)  
EPC.

**Composition of the Board:**

**Chairman:** F. Gumbel  
**Members:** S. Crane  
J. van Moer

## Summary of Facts and Submissions

- I. European patent No. 0 431 873 was granted on 21 September 1994 on the basis of European patent application No. 90 313 111.8.

Claim 1 of the granted patent reads as follows:

"A fuel dispenser system comprising a first enclosure (19) and a second enclosure (31 ) separated by an air gap (29), the first enclosure being arranged such that in operation it is substantially free from both fuel and fuel vapour and enclosing electrical apparatus (25) associated with the operation of the dispenser, and the second enclosure enclosing mechanical apparatus (49, 86) associated with the operation of the dispenser, characterised in that at least one mechanical linkage (35) connects the portions of an electromechanical valve (25) having its electrical portion located in the first enclosure (19) and its mechanical portion (49, 86) located in the second enclosure (31)."

Dependent claims 2 to 13 relate to preferred embodiments of the fuel dispenser system according to claim 1.

Independent claim 14 reads as follows:

"A fuel dispenser for controlling the dispensing of fuel from a pressurised supply external of the dispenser, the dispenser comprising a first enclosure (19) and a second enclosure (31 ) separated by an air gap (29), the first enclosure being arranged such that in operation it is substantially free from fuel and fuel vapour and enclosing electrical apparatus (25) associated with the operation of the dispenser, the second enclosure enclosing mechanical apparatus (49,

86) associated with the dispenser, the dispenser further comprising at least one mechanical linkage (35) connecting the portions of an electromechanical apparatus having its electrical portion (25) located in the first enclosure and its mechanical portion (49, 86) located in the second enclosure, the dispenser being characterised in that the second enclosure is free from electrical apparatus."

II. The granted patent was opposed by the present appellants on the basis that its subject-matter lacked inventive step with respect to the state of the art (Articles 100(a) and 56 EPC) and that the claimed invention was insufficiently disclosed (Article 100(b) EPC).

Of the state of the art documents mentioned in the notice of opposition only the following has been relied upon on appeal:

(E1) Merkblatt "Elektrische Einrichtungen von Tankstellen", Verband der Technischen Überwachungs-Vereine e.V., Essen", Ausgabe Mai 1986.

III. The Opposition Division issued a summons to the parties to attend oral proceedings on 29 November 1996. In accordance with Rule 71(a)(1) EPC the summons was accompanied by a communication outlining the issues to be discussed and set a final date of 29 October 1996 for making further written submissions.

On this final date the appellants filed a reply in which reference was made to two works drawings namely "Zapfsäule Typ 730 CEN 5G" (document E8) and

"Winkeltrieb mit Impulsgeber DP2 mit Kugelwelle und Totalisator" (document E9). Both drawings are dated 1980. According to the appellants corresponding fuel dispensers had been built for customers in France.

In another letter received on 5 November 1996 the appellants referred to two further documents E11 and E12, namely "BASEEFA Certificate of Assurance No. Ex 76186" dated 31 October 1977 and "BASEEFA Certificate of Assurance No. Ex 83282" dated 12 August 1983. (BASEEFA is the British Approvals Service for Electrical Equipment in Flammable Atmospheres.)

At the oral proceedings the Opposition Division, with reference to Article 114(2) and Rule 71(a)(1) EPC, decided to disregard the late-filed evidence represented by documents E8, E9, E11 and E12.

- IV. The Opposition Division posted its written decision rejecting the opposition on 17 February 1997.
- V. An appeal against this decision was filed on 12 March 1997 and the fee for appeal paid at the same time. The appellants requested that the decision under appeal be set aside and the patent revoked in its entirety.

In the statement of grounds of appeal, filed on 25 June 1997, the appellants argued that the Opposition Division had erred in disregarding documents E8, E9, E11 and E12, since the principle of ex-officio examination according to Article 114(1) EPC should take precedence over the discretionary power to disregard evidence given by Article 114(2) EPC. Documents E8, E9, E11 and E12 were clearly relevant to the decisive issue at hand since they showed the separation of the electrical and mechanical parts of electromechanical apparatus used in fuel dispensers, with the mechanical parts being located in a classified explosion

endangered enclosure and the electrical parts located in a unclassified enclosure. Also, document E1 showed that it was generally known to provide an air gap between the classified and unclassified enclosures of a fuel dispenser and to provide a mechanical linkage to transfer motion between operatively associated parts located in the two enclosures. Document E1 also taught that if electrical equipment was housed in the classified enclosure then it had to be specially protected to make them explosion safe. In order to avoid this it was obvious on the basis of the teachings of documents E1, E8, E9, E11 and E12 to separate the mechanical and electrical parts of any electromechanical apparatus present, for example an electromechanical valve, and to provide a mechanical linkage between them to bridge the air gap between the classified and the unclassified enclosures, where the mechanical and electrical parts were respectively located. These obvious considerations led to the claimed invention.

VI. In a counterstatement, filed on 5 September 1997 and transmitted to the appellants with a communication dated 16 September 1997, the respondents (proprietors of the patent) replied substantially as follows:

Document E1 disclosed no more than what had already been recognised as state of the art in the patent specification and in the pre-characterising clauses of the independent claims. The arguments of the appellants to the contrary were based solely on hindsight knowledge of the invention. The Opposition Division had been correct in deciding to disregard the late-filed documents E8, D9, E11 and E12 pursuant to Article 114(2) EPC. In the first place the appellants had produced no evidence that what was shown in documents E8 and E9 had been made available to the public by prior use or that the drawings associated

with documents E11 and E12 had been prepublished. In the second place none of these documents, so far as they could be understood, appeared to contain anything of relevance to the claimed invention.

The respondents therefore requested that the appeal be dismissed.

### Reasons for the Decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rules 1(1) and 65 EPC. It is therefore admissible.
  
2. The patent specification contains an extensive exposition of the safety requirements relating to fuel dispensers and various prior art proposals for constructions to meet these requirements. It is mentioned that in typical prior art fuel dispensers, electrical devices are either enclosed in explosion proof housings or are isolated through the use of intrinsically safe circuitry. It is also stated that it is known to place the mechanical part (flow meter) of a fuel meter in a hazardous or classified zone and its associated electrical part, such as a pulse generator, in an unclassified zone, i.e. a zone where in use there is no fuel and no appreciable build up of fuel vapour. The two zones are separated by an air gap which forms a vapour barrier and a mechanical linkage is used to interconnect the mechanical and electrical parts of the fuel meter.

One typical piece of equipment used in fuel dispensers is an electromagnetic valve for controlling the flow of fuel in dependence on a variety of control signals. In one aspect of the invention (claim 1) it is proposed to

separate the mechanical and electrical parts of such an electromagnetic valve and locate them respectively in the classified and unclassified zones, with a mechanical linkage extending between them. Normally, the electromagnetic valve would be contained as a whole in the classified zone and would therefore be subject to the conventional safety requirements for electrical equipment in this zone. Thus, according to this first aspect of the invention it is no longer necessary for these requirements to be met in respect of the electromagnetic valve. In a second aspect of the invention (claim 14) it is proposed to extend this concept further and arrange the mechanical and electrical parts of any electromechanical apparatus in such a way that the classified zone is free from electrical apparatus.

3. Document E1 is a summary of the requirements concerning the use of electrical equipment in fuel dispensers. With reference to Figures 1 and 2 there is a general explanation of what is meant by hazardous or classified zones and unclassified zones and the possibility of separating a classified and an unclassified zone by means of an air gap. Figures 3 and 4 show respectively, in schematic form, how a cable and a mechanical linkage for transferring rotation should be arranged when extending across the air gap between a classified and an unclassified zone. In point 6.1.2 on page 9 it is stated that electrical equipment can only be used in a classified zone when it is explosion proof.

In the opinion of the Board the respondents are right in their contention that document E1 adds nothing to the state of the art acknowledged in the patent specification. Insofar as Figure 4 shows how rotational motion should be transferred mechanically between a classified and an unclassified zone, the person skilled in the art is given no guidance as to what purpose or

between which parts this transfer takes place. Given that it was known to locate electrical totalisator and fuel quantity indicator equipment in the unclassified zone, the person skilled in the art would most probably assume that the mechanical linkage was between this equipment and a flow meter in the classified zone. Certainly, there is no suggestion in document E1 to separate the mechanical and electrical parts of an electromagnetic valve so that they can be located respectively in the classified and unclassified zone or to take corresponding measures to ensure that the classified zone is completely free of electrical apparatus.

The only other documents relied upon by the appellants with respect to the question of inventive step, viz E8, E9, E11 and E12, were all filed after the end of the nine month opposition period and were disregarded by the opposition in the exercise of its discretion under Article 114(2) EPC. In the opinion of the Board there is nothing which could indicate that this discretion was exercised improperly. Not only is it unclear whether the content of these documents belong to the state of the art, but even if this were the case there appears to be nothing in them which would lead the person skilled in the art to what is claimed in the contested patent.

The Board had therefore come to the conclusion that the subject-matter of independent claims 1 and 14 cannot be derived from the state of the art under consideration and therefore involves an inventive step (Article 56 EPC).

4. The original objection of the appellants under Article 100(b) EPC has been dealt with satisfactorily by the Opposition Division in point 3 of the contested decision and has not been mentioned by the appellants

in their statement of grounds. The Board has therefore nothing to add to what the Opposition Division has said in this regard.

**Order**

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

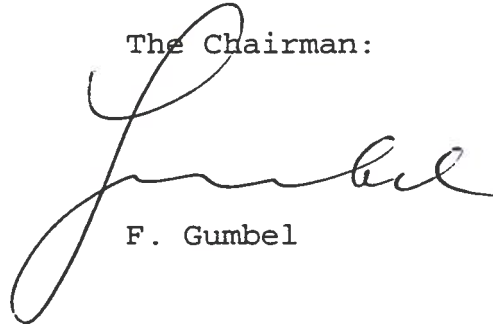
The appeal is dismissed.

The Registrar:



S. Fabiani

The Chairman:



F. Gumbel

