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**Datasheet for the decision  
of 31 March 2009**

**Case Number:** T 0523/07 - 3.2.01

**Application Number:** 00116731.1

**Publication Number:** 1136351

**IPC:** B63C 11/08

**Language of the proceedings:** EN

**Title of invention:**

Changeable set-up watertight diving suit

**Applicant:**

MARES S.p.A.

**Headword:**

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**Relevant legal provisions:**

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**Relevant legal provisions (EPC 1973):**

EPC Art. 56

**Keyword:**

"Inventive step (no)"

**Decisions cited:**

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**Catchword:**

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Case Number: T 0523/07 - 3.2.01

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.01  
of 31 March 2009

**Appellant:** MARES S.p.A.  
Salita Bonsen 4  
I-16035 Rapallo GE (IT)

**Representative:** Porsia, Attilio  
c/o Succ. Ing. Fischetti & Weber  
Via Caffaro 3/2  
I-16124 Genova (IT)

**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 13 December 2006  
refusing European application No. 00116731.1  
pursuant to Article 97(1) EPC 1973.

**Composition of the Board:**

**Chairman:** S. Crane  
**Members:** C. Narcisi  
T. Karamanli

## Summary of Facts and Submissions

- I. The European patent application No. 00 116 731.1 was refused with a decision of the Examining Division posted on 13 December 2006. The Examining Division considered that the subject-matter of claim 1 as filed with letter dated 7 October 2005 lacked an inventive step with regard to the combination of documents D3 (US-A-5 940 878) and D4 (EP-A-945 339).
- II. Against this decision an appeal was filed by the Applicant on 2 February 2007 and the appeal fee was paid on 1 February 2007. The statement of grounds of appeal was filed on 15 March 2007. The Appellant requested that the decision be set aside and that a patent be granted on the basis of claims 1 to 6 as filed with letter of 7 October 2005.

Claim 1 reads as follows:

"A watertight diving suit (1) with changeable set-up, of the type including at least one air-charging valve (12) connected to a compressed air source (2) and at least one first discharging valve (3) positioned on the diving suit (1) upper part and at least one second discharging valve (4,5) positioned on the diving suit (1) lower part; a pneumatic control device (7,8,9,11) controlling independently both said charging valve (12), for the introduction of the air into the diving suit (1), and said discharging valves (3,4,5), for the exhausting of the air from the diving suit (1), the said discharging valves (3,4,5) and said charging valve (12) being connected to the pneumatic control device (7,8,9,11) through their pipes (6,13) positioned inside

and/or outside the diving suit (1), characterized in that said device (7,8,9,11) includes at least one valve (7) provided of at least one inlet connected through a duct (10) to said source (2) of compressed air, at least one first outlet connected to the pipes (6) of the discharging valves (3,4,5) and at least one second outlet connected with the pipes (13) of the charging valve (12), said charging and discharging of air being adjusted through their respective valves (3,4,5,12) by control means (11,8) independent and operated by the diver."

III. The Appellant's arguments in writing may be summarized as follows:

The most relevant state of the art is represented by document D3. It discloses a watertight diving suit with a changeable set-up, of the type including at least one air charging valve 14 connected to a compressed air source and at least one first discharging valve 16 positioned on the diving suit's upper part and at least one second discharging valve 12 positioned on the diving suit's lower part. From the remaining features of claim 1 constituting the difference to prior art D3 the objective problem of the invention may be deduced as consisting in allowing easy, quick and safe charging and discharging of air into or from the diving suit.

Document D4 discloses a buoyancy compensator vest (BCV) which is used to control the buoyancy of the diver. By contrast, the watertight diving suit of D3 is not used for this same purpose, but instead to provide in conjunction with the air inflated into the diving suit an improved thermal isolation. Consequently D3 and D4

relate to different technical objects and are directed to different technical problems, such that their combination would not be obvious for the skilled person. If anything, the skilled person would possibly consider, in case both a BCV and a watertight diving suit should be used, to connect the diving suit to the air control system 3 or 4 of the BVC of D4 in order to inflate the diving suit and to regulate the filling. This is indeed explicitly suggested in D4 (see paragraph [0016]). There would be no reason and no incentive for the skilled person to operate the watertight diving suit by means of multiple discharge valves, controlled by a single central control means. Therefore the subject-matter of claim 1 involves an inventive step over the cited prior art since the combination of D3 and D4 would not be obvious for the skilled person and it would not lead to the claimed subject-matter.

- IV. With communication dated 23 December 2008 the Appellant was summoned to oral proceedings. The Appellant was likewise informed that according to the preliminary opinion of the Board the subject-matter of claim 1 could not be regarded as inventive over D3 in view of D4.
  
- V. Oral proceedings were held on 31 March 2009. The duly summoned Appellant did not appear, as already advised with letter dated 24 March 2009.

### **Reasons for the Decision**

- 1. The appeal is admissible.

2. In accordance with Article 15 (3) RPBA the Board was not obliged to delay its decision by reason only of the absence of the duly summoned Appellant who was treated as relying only on its written case. Since the case was ready for a decision the Chairman announced the decision at the conclusion of the oral proceedings.
  
3. The Board agrees with the Appellant's view that D3 is to be considered as closest prior art. D3 discloses a watertight diving suit including at least one air charging valve 14 connected to a compressed air source and at least one first discharging valve 16 positioned on the diving suit's upper part and one second discharging valve 12 positioned on the diving suit's lower part (D3, figure 1). Further, it is clearly apparent from D3 that the watertight diving suit disclosed therein may be used to a certain extent to control buoyancy (D3, column 1, lines 1-55), by inflating or deflating the respective charging valve or discharging valves. In the normal course of development the skilled person will look for a way to improve the diver's comfort and ease when operating these valves.

The skilled person looking for a solution of the stated technical problem would become aware of document D4. D4 specifically provides a pneumatic control device 4 (figure 1-4) with independent control means 304, 404 to be operated by the diver for inflating the balancing jacket, or BVC (see above), by controlling said charging valve, and for deflating the same, by controlling said discharging valves (D4, column 2, lines 10-15; column 3, lines 15-17). Evidently, said pneumatic control system 4 includes at least one valve

provided with an inlet connected through a duct to a source of compressed air (D4, figure 2; column 2, lines 52-53) and a first outlet connected through pipes with the discharging valves (D4, column 3, lines 15-17). There is likewise provided a second outlet connected through pipes with the charging valves (D4, column 2, lines 54-56; claim 4).

The skilled person would recognize that the pneumatic control system disclosed in D4 for operating both the charging valve and the discharging valves of a balancing jacket in an improved manner may be readily applied to the watertight diving suit of D3 for controlling its inflation and deflation. Hence the obvious combination of D3 and D4 would clearly lead to the subject-matter of claim 1. For the given reasons the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC 1973).

## **Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

A. Vottner

S. Crane