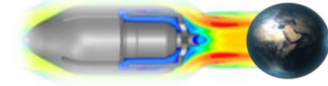


# Hyreval® World patented multifunctional valve



## US & EU recognized and validated Patent

### EU Patent

The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

**United States Patent**

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

*Michelle K. Lee*  
Deputy Director of the United States Patent and Trademark Office

Europäisches Patentamt  
European Patent Office  
Office européen des brevets

**URKUNDE      CERTIFICATE      CERTIFICAT**

Es wird hiermit bescheinigt, dass für die in der Patentschrift beschriebene Erfindung ein europäisches Patent für die in der Patentschrift beschriebenen Vertragsstaaten erteilt worden ist.

It is hereby certified that a European patent has been granted in respect of the invention described in the patent specification for the Contracting States designated in the specification.

Il est certifié qu'un brevet européen a été délivré pour l'invention décrite dans le fascicule de brevet, pour les Etats contractants désignés dans le fascicule de brevet.

Europäisches Patent No.      European patent No.      Brevet européen n°

2433037

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42240 Ivaneč/HR

19.06.13

Benoit Battistelli  
Präsident des Europäischen Patentamts  
President of the European Patent Office  
Président de l'Office européen des brevets

**(12) United States Patent**  
**Canjuga**

(10) Patent No.: **US 8,931,504 B2**  
(45) Date of Patent: **Jan. 13, 2015**

(54) **HYDRAULIC AXIAL PISTON REGULATING VALVE AND ITS APPLICATION**

(75) Inventor: **Slavko Canjuga, France (FR)**

(73) Assignee: **Hydromat-Inzenjering D.O.O., France (FR)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 559 days.

(21) Appl. No.: **13/021,181**

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(86) PCT No.: **PCT/HR2010/000014**

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May 17, 2010 (HR) P 20100273 A

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**F16K 1/12** (2006.01)  
**F16K 31/02** (2006.01)  
**G05B 1/02** (2006.01)  
**F16K 31/22** (2006.01)

(52) U.S. Cl. Cl.      **F16K 1/126** (2013.01); **F16K 31/2221** (2013.01)  
CPC      **F16K 1/126** (2013.01); **F16K 31/2221** (2013.01)  
USPC      **137/220, 37/554, 251/129.04, 700/42**

**15 Claims, 16 Drawing Sheets**

(19) (11) **EP 2 433 037 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent: **10.06.2013 Bulletin 2013/25**

(21) Application number: **10728876.3**

(22) Date of filing: **19.05.2010**

(54) **REGULATION VALVE WITH HYDRAULIC AXIAL PISTON AND ITS USE**  
REGULATIONSVENTIL MIT HYDRAULISCHEN AXIALKOLBEN UND SEINE VERWENDUNG  
VANNE DE RÉGULATION DE PISTON AXIALE HYDRAULIQUE ET SON APPLICATION

(84) Designated Contracting States:  
**AL AT BE BG CH CZ CY DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR**  
Designated Extension States:  
**BA RS**

(85) International application number:  
**WO 2010/133902 (25.11.2010 Gazette 2010/47)**

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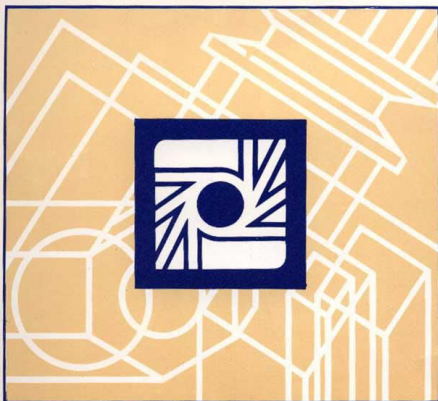
(89) International application number:  
**WO 2010/133902 (25.11.2010 Gazette 2010/47)**

EP 2 433 037 B1

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 69(1) European Patent Convention).

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### US Patent



Organizacijski Odbor

**inova '85**

odjeljuje

**PRIZNANJE**

**SLAVKA ČANJUGA**

za sudjelovanje na 13. izložbi izuma, tehničkih unapređenja i noviteta INOVA '85



Predsjednik Organizacijskog odbora

U Zagrebu, 15.-21. IV 1985.



**HYDROMAT Ivanec**  
za Hidrolift 70 - stroj - dizalicu za marine

OCJENJIVAČKI SUD, PREDSEDNIK:  
Kap. Davor Pavličić

DIREKTOR:  
Mladen Stajduhar, dipl. ing.

PRIREĐIVAČKI ODBOR, PREDSEDNIK:  
Dr. Ivan Frančisković

Rijeka, 15. 03. 1987.



Prosudbeni odbor

**inova 97**

VI. HRVATSKI SALON INOVACIJA

ZAGREB

**ZLATNA PLAKETA**  
**SLAVKO ČANJUGA**  
*„Hidrolift“*

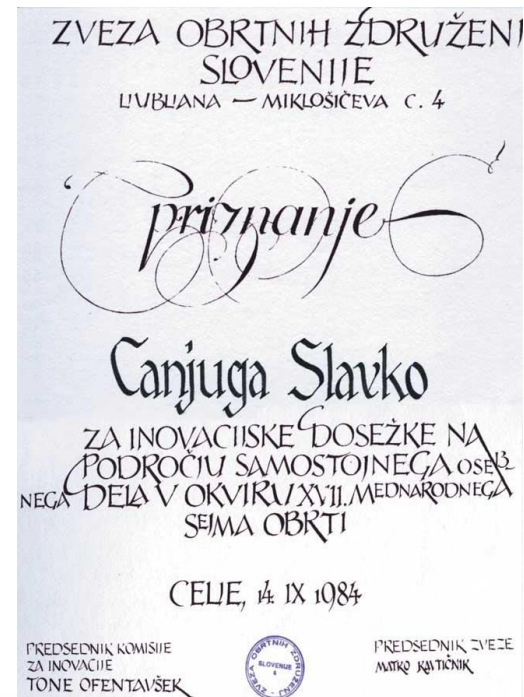


hrvatski savez inovatora

Zagreb, 8. rujna 1997.

Predsjednik prosudbenog odbora

Dr. Stjepan Čar



ZVEZA OBRJNIH ŽDRUŽENJ  
SLOVENIJE

LJUBLJANA — MIKLOŠIČEVA C. 4

*Priznanje*

**Čanjuga Slavko**

ZA INOVACIJSKE DOSEŽKE NA  
PODROČJU SAMOSTOJNEGA OSEB-  
NEGA DELA V OKVIRU XVII. MEDNARODNEGA  
SEJMA OBRTI

CELE, 14. IX 1984

PREDSEDNIK KOMISIJE  
ZA INOVACIJE  
TONE OFENTAVŠEK



PREDSEDNIK ZVEZE  
MIRKO KATIČNIK



**DIPLÔME**



**25<sup>E</sup> SALON  
INTERNATIONAL  
DES INVENTIONS  
GENÈVE 1997**

Après examen, le Jury International a décidé  
de remettre à: HYDROMAT S.A.

pour l'invention: HYDROLIFT - Solution hydraulique pour la manipulation d'embarcations

UNE MEDAILLE D'OR Genève, le 14 avril 1997

*[Signature]*  
le Président du Jury

*[Signature]*  
le Président du Comité  
d'Organisation du Salon