

43

ESCOBAR - URIBE ASOCIADOS

A B O G A D O S

Carrera 11A No. 94-76 Of. 305 - P.O. Box 94948, Bogotá, Colombia, S.A.
Tels: (571) 6162051 - 6162061 - 6161839 - 6161869
Fax: (571) 6161889

2664/PCT

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISION DE NUEVAS CREACIONES
E. S. D.

Ref.: Expediente No. 04.039.406
Solicitud de Patente a nombre de
MEDOS S.A.

SUPERINDUSTRIA Y COMERCIO
Radicacion: 04039406 00000002 Folios: 20
Fecha (AMB): 2004-06-29 16:16 22
Tramite: 011 PCT-PATENT 329 FASE NACI 329 COMPLEMEN
Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

Yo, JIMENA ESCOBAR URIBE, identificada como aparece al pie de mi firma, domiciliada en la Carrera 11 A No. 94-76, Of. 305, obrando como apoderada de la sociedad MEDOS S.A., domiciliada en Le Locle, Suiza, solicitante de la patente de la referencia, atentamente me permito anexar los siguientes documentos:

1. Copia auténtica del poder otorgado por la sociedad MEDOS S.A., como también del certificado de existencia y representación legal de dicha sociedad debidamente apostillados. De los documentos mencionados se acompaña la correspondiente traducción oficial debidamente legalizada por el Ministerio de Relaciones Exteriores de Colombia.
2. Formato de solicitud y opinión escrita de la fase internacional.

Señor Superintendente,


JIMENA ESCOBAR URIBE
C.C.39.779.452 de Usaquén
T.P. 68.228

13516 CO 3/14
REF: 26641P
2664. 44

PODER

El (los) suscrito (a) MEDOS S.A.

domicillado (s) en La Jocke, Suiza

nombra por el presente

a Eric Nagels

y para obtener la protección de mi (nuestra) propiedad industrial y con este fin autorizamos a dichos apoderados para que nos representen ante cualesquiera autoridades o personas de los órdenes administrativo, contencioso-administrativo y judicial en todo lo relacionado con los siguientes actos y gestiones:
a) Obtención de patentes de invención, modelos y dibujos industriales; registro de marcas de fábrica, de servicio, colectivas o defensivas y de denominaciones de origen; depósito de nombres y enseñas comerciales; su renovación prórroga, inscripción de traspaso y cambio de nombre o domicilio, cancelación voluntaria y el registro de licencia de uso de esos derechos; b) acciones de oposición, cancelación, nulidad, medidas cautelares y en general los juicios civiles, penales, administrativos o contencioso-administrativos que promovamos o se nos promuevan, pudiendo en todos los actos y gestiones arriba determinados sustituir éste mandato, transigir, desistír, recibir, cancelar, renunciar, aceptar notificaciones y nombrar apoderados judiciales y extrajudiciales.

Dado y firmado hoy _____

en _____

Por _____

(Notary should execute on other side)
(Consular legalization necessary)
S. Nagels
MEDOS S.A.

POWER OF ATTORNEY

I (we) the undersigned MEDOS S.A.

of La Jocke, Suiza

hereby grant(s) Power of Attorney to

Eric Nagels ?

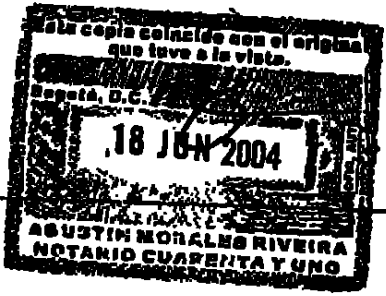
and to obtain the protection of my (our) industrial property, for wich purpose we authorize the said attorneys to represent us before any authorities or persons, specially those, administrative, administrative contentious and judicial, in all matters concerning the following:
a) Obtainment of patents, models and designs; the registration of trademarks, service, collective and defensive marks, and of designations of origin; the deposit of commercial names and ensigns; its renewal, extension, recordal of assignments, change of name or domicile, voluntary cancellation; and the registration of licenses of use of the above rights; b) Actions opposition, cancellation, nullity, infringement, granting of licenses; and in general the civil, penal an administrative suits relating to those rights; actions and suits instituted by us or against us; and that in all the above matters they may substitute this Power of Attorney, compromise, desist, cancel, receive, renounce, accept notifications and appoint attorneys in fact in or out of Court.

Given and signed this _____

In _____

By _____

(Notary should execute on other side)
(Consular legalization necessary)



CERTIFICADO NOTARIAL (Sociedad)

Hoy, 23 de Abril de 2004
comparció (eron) personalmente Eric Nagels
y André Haemmerli

a quien (es) conozco como la (s) persona (s) que firma (n) este
documento en representación de la Sociedad / Compañía denominada
Medos S.A.

Certifico:

a) Que Medos S.A.
es una Sociedad / Compañía legalmente constituida y existente de
acuerdo con las leyes de Suiza

b) Que el domicilio de dicha Sociedad / Compañía es
Le Locle, rue Girardet

c) Que el objeto u objetos para los cuales se otorga el presente poder
están comprendidos dentro del objeto social de la mencionada
Sociedad / Compañía,

d) Que el Sr. Eric Nagels y André
Haemmerli
está autorizado para otorgar el presente poder. Lo anterior está
probado por medio de los siguientes documentos, que certifico he
visto: Certificado oficial (ex-
tracto) del registro de
comercio del cantón de
Neuchâtel, Suiza

(Ciudad)

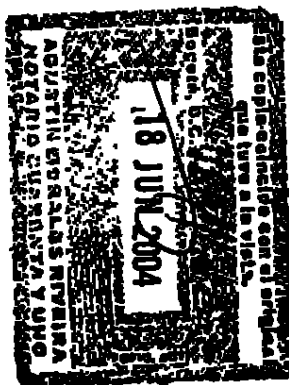
(Estado)

Hoy: 23 de Abril de 2004

(Notario Público)

RGV 125, No. 124

* Los documentos deben identificarse con fecha y origen.



NOTARIAL CERTIFICATE (Corporation)

On this 23th day of April 2004
personally appeared
MM. Eric Nagels and André Haemmerli

whom I know to be the person (s) who signed this documents as
representative (s) of the Corporation / Company named
MEDOS SA

I Certify

a) That MEDOS SA
is a Corporation / Company legally constituted and in existence in
accordance with the laws of Switzerland

b) That the domicile of said Corporation / Company is
Le Locle, rue Girardet 29

c) That the purpose or purposes for which the present Power of
Attorney is granted are comprised within the object set forth in the
charter of the mentioned Corporation / Company.

d) That Mr. Eric Nagels et André
Haemmerli

Xix (are) authorized to grant the present Power of Attorney. The
aforementioned was duly proven through the following documents
and I duly certify having seen them:

official certificate (extract) of
the Commercial Register of
Canton de Neuchâtel, Switzerland

(City)

(State)

this 23 day of April 2004

(Notary Public)

RGV 125, No. 124

* Document must be identified with date and origin.



[Handwritten signature]

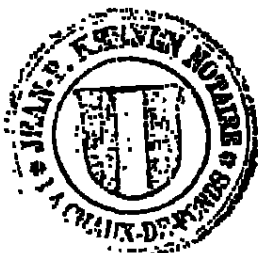
45

LEGALIZATION

Jean-Philippe Kernen, notary public of the Canton of Neuchâtel, Switzerland, with office at La Chaux-de-Fonds certifies that the foregoing signature was written in his own hand by Mr Eric Nagels, from Saignelégier (JU) in La Chaux-de-Fonds (NE) Switzerland who is competent to act and known to the notary personally and by Mr André Hämmerli, from Brüttelen (BE), in La Chaux-de-Fonds (NE) Switzerland, in representation of Medos S.A., residing at Le Locle (Switzerland), who are competent to act and known to the notary personally.

Certified at the office of the notary public on April, twenty-three, two thousand and four (April, 23, 2004)

RGV 125, no. 124



[Handwritten signature]

APOSTILLE

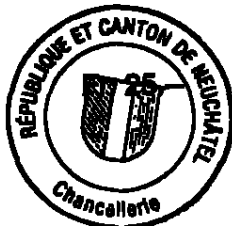
(Convention de La Haye du 5 octobre 1961)

1. Country: Switzerland
This public document
2. has been signed by Me Jean-Philippe Kernen,
3. acting in his (her) capacity of notary,
4. bears the seal/stamp of Me Jean-Philippe Kernen; notary at la Chaux-de-Fonds/canton of Neuchâtel/Switzerland.-

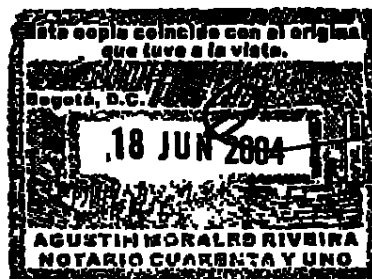
Attesté

- | | |
|-----------------------------|------------------|
| 5. 15 Neuchâtel | 6. on 27/04/2004 |
| 7. by the State Chancellery | |
| 8. under No 827 | |
| 9. Seal/Stamp : | 10. Signature |

State Chancellery



[Handwritten signature]
D. De Marco





REGISTRE DU COMMERCE DU CANTON DE NEUCHÂTEL

EXTRAIT DU REGISTRE
Report du 20 décembre 1996
No réf. 30018/1992
N° féd. CH-645-1000956-4

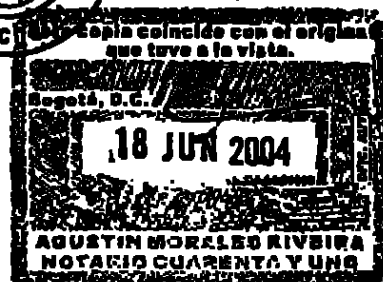
Medos S.A.

Société anonyme inscrite le 19 février 1992

Réf.	Raison Sociale
1	Medos S.A.
Réf.	Siège
1	Le Locle
Réf.	Adresse
1 2	chemin des Fourelles 17 rue Girardet 29
Réf.	Dates des Statuts
1	18.02.1983 20.12.1993
Réf.	But, Observations
1	But: étude, développement, production et commercialisation d'applications des principes de la physique et la biotechnologie à la médecine, en particulier d'implants et d'instruments médicaux. Administration: un ou plusieurs membres.
Réf.	Organe de publication - mode de communication aux actionnaires
1	FOSC

Réf.	Capital-Actions		
	Nominal	Libéré	Actions
1	CHF 4'850'100	CHF 4'850'100	16'167 actions de CHF 300, nominatives

Réf.	Administration, organe de direction et personnes ayant qualité pour signer		
Inscr.	Mod.	Rad.	Nom et Prénom(s), Origine, Domicile, Fonctions, Mode de signature
1		4	Cherry Joseph A., des USA, à Mansfield, USA adm. président signature individuelle
1	m	4	Bänninger Rolf, d'Heiden, à Schaffhouse adm. vice-président signature individuelle
1		3	Desaules Jean-Jacques, de Dombresson, aux Brenets adm. secrétaire signature collective à 2
		5	"Société Fiduciaire Suisse Coopers & Lybrand SA", succursale à Neuchâtel réviseur
1		3	Sullivan Christopher Arthur, des USA, à Neuchâtel directeur signature collective à 2
2		3	Legros Dominique Pierre-Mario Joseph, de France, à Charquemont F directeur signature collective à 2
3			Nagels Eric, de Saignelégier, à La Chaux-de-Fonds adm. signature collective à 2
3			Oppliger Yves, de Röthenbach im Emmental, à Neuchâtel' procuration collective à 2
4			Manginelli Richard P., des Etats-Unis, à Dorchester, MA, USA adm. président signature collective à 2



Réf.			Administration, organes de révision et personnes ayant qualité pour signer		
Inscr.	Mod.	Rad.	Nom et Prénom(s), Origine, Domicile	Fonctions	Mode de signature
4			Hämmerli André, de Brüttelen, à La Chaux-de-Fonds	adm. vice-président	signature collective à 2
4	4		Bänziger Rolf, d'Heiden, à Schaffhouse	adm.	signature collective à 2
4			Matile Chantal, de La Sagne, à Chézard-Saint-Martin		procuration collective à 2
5			"PricewaterhouseCoopers SA", succursale à Neuchâtel	réviscur	

Réf.	JOURNAL		PUBLICATION FOSC	
	Numéro	Date	Date	Page
1	44	18.04.1995	28.04.1995	2342
3	1962	10.08.2000	16.08.2000	5581
5	1967	11.07.2002	17.07.2002	8

Réf.	JOURNAL		PUBLICATION FOSC	
	Numéro	Date	Date	Page
2	2658	24.12.1996	16.01.1997	298
4	2348	11 10 2001	17 10 2001	8103

Neuchâtel, le 22 avril 2004

Extrait certifié conforme

22 AVR. 2004

Le proposé par délégation



Fin de l'extrait

APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Pays: Suisse

Le présent acte public

2. a été signé par Mme Monique Riera,

3. agissant en qualité de collaboratrice spécialisée,

4. est revêtu du sceau/timbre du registre du commerce de Neuchâtel.---

Attesté

5. à Neuchâtel

6. le 27/04/2004

7. par la chancellerie d'Etat

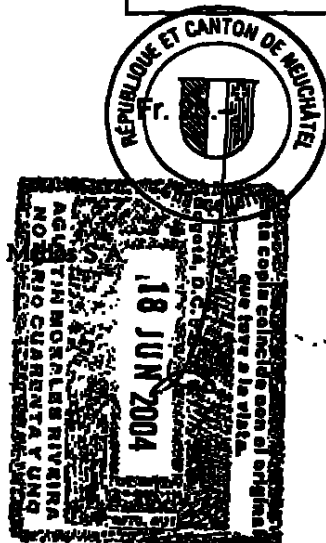
8. sous No 820

9. Sceau/timbre

10. Signature

Chancellerie d'Etat

D. De Marco
D. De Marco



Le Locle, April 2004

POWER OF ATTORNEY

To whom it may concerns:

We hereby certify that:

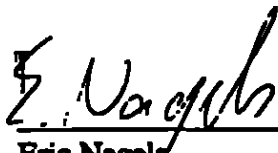
JOHNSON & JOHNSON DE COLOMBIA S.A.
YUMBO - VALLE / COLOMBIA

is authorized by:

MEDOS SA
GIRARDET 29
CH - 2400 LE LOCLE
SWITZERLAND

To act as our Sole Agent to register, import and sell: MEDOS SA products in Colombia.

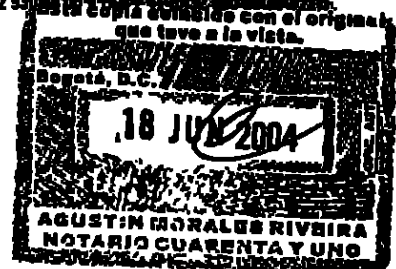

André Haemmerli
General Manager


Eric Nagels
Finance Director

MEDOS S.A. • COOMAN S&I • DEPUY ACE S&I
RUE GIRARDET 29 • CASE POSTALE • CH - 2400 LE LOCLE
TÉL. + 41 (0)32 933 83 00 • FAX + 41 (0)32 933 83 90

ETHICON S&I • DEPUY MITEK S&I
PLAIS-GODET 20 • CH - 2000 NEUCHÂTEL
TÉL. + 41 (0)32 727 76 00 • FAX + 41 (0)32 727 76 10

COOMAN NEURO SCIENCES S&I • DEPUY SPINE S&I
CHEMIN-BLANC 36 • CASE POSTALE • CH - 2400 LE LOCLE
TÉL. + 41 (0)32 933 83 00 • FAX + 41 (0)32 933 83 90



LEGALIZATION

Jean-Philippe Kernen, notary public of the Canton of Neuchâtel, Switzerland, with office at La Chaux-de-Fonds certifies that the foregoing signature was written in his own hand by Mr Eric Nagels, from Saignelégier (JU) in La Chaux-de-Fonds (NE) Switzerland who is competent to act and known to the notary personally and by Mr André Hämmerli, from Brüttelen (BE), in La Chaux-de-Fonds (NE) Switzerland, in representation of Medos S.A., residing at Le Locle (Switzerland), who are competent to act and known to the notary personally.

Certified at the office of the notary public on April, twenty-three, two thousand and four (April, 23, 2004)

RGV 125, no. 123



APOSTILLE

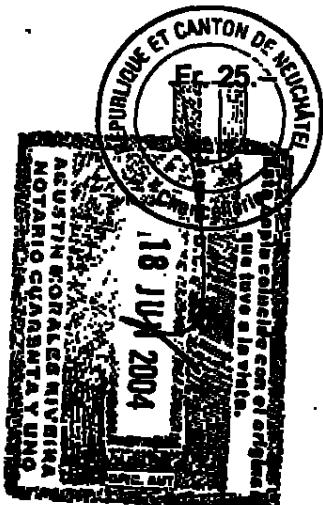
(Convention de La Haye du 5 octobre 1961)

1. Country: Switzerland
This public document
2. has been signed by Me Jean-Philippe Kernen,
3. acting in his (her) capacity of notary,
4. bears the seal/stamp of Me Jean-Philippe Kernen, notary
at la Chaux-de-Fonds/canton of Neuchâtel/Switzerland.-

Attesté

- | | |
|-----------------------------|------------------|
| 5. 15 Neuchâtel | 6. on 27/04/2004 |
| 7. by the State Chancellery | |
| 8. under No 828 | |
| 9. Seal/Stamp : | 10. Signature |

State Chancellery



D. De Marco

LEGALIZACIÓN

Jean- Philippe Kernen, Notario Publico del Cantón de Neuchâtel, Suiza, con oficina en La Chaux-de- Fonds certifica que la anterior firma fue escrita de su propia mano por Sr. Eric Nagels, de Saignelégier (JU) en La Chaux-de-Fonds (NE) Suiza y por Sr. André Hämmerli, de Brüttelen (BE), en La Chaux-de-Fonds (NE) Suiza, en representación de Medos S.A, residentes en Le Locle (Suiza), quienes son competentes para actuar y se presentaron personalmente ante el notario.

Certificado en la oficina del Notario Publico en Abril 23 del 2004

RGV 125, no. 124

APOSTILLE

(Convenio de la Haya de Octubre de 1961)

1. País: Suiza

Este documento Público

2. Firmado por Jean- Philippe Kernen

3. Actuando en calidad de: Notario

4. Lleva el sello de Jean- Philippe Kernen, Notario en La Chaux-de-Fonds/ Canton de Neuchâtel/ Suiza

CERTIFICA

5. En Neuchâtel

6. El 27/04/2004

7. Por la Chancillería de Estado

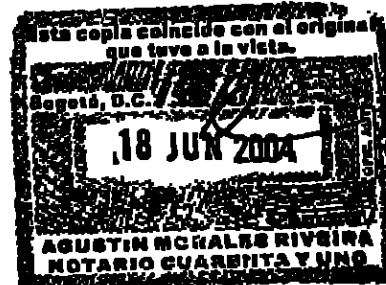
8. Bajo el No. 827

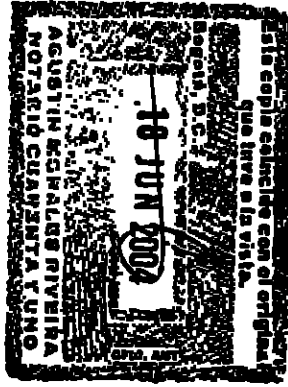
9. Sello

10. Firma:

Cancillería de Estado

D. De Marco





MINISTERIO DE
RELACIONES EXTERIORES

232477
Clemenca Paredes
CUYA FIRMA APARECE EN EL
DOCUMENTO DESEMPENA
LAS FUNCIONES INDICADAS

NO SE ASUME
RESPONSABILIDAD DEL TEXTO

2004 JUN -8 A 11:05

Mos
JEFE DE LEGALIZACIONES
BOGOTÁ D.C.

EXTRACTO DEL REGISTRO

Reporte del 20 de diciembre de 1996

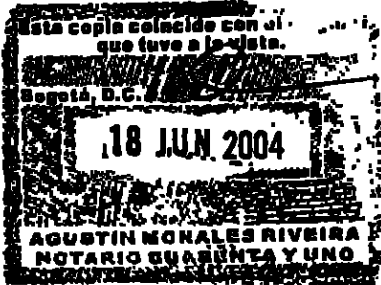
Ref No. 30018/1992

Fed. N° CH- 645- 1000956- 4

Medos S.A.

Sociedad anónima inscrita el 19 de febrero de 1992

	Razón Social
1	Medos S.A.
	Sede
1	Le Locle
	Dirección
1	Chemin des Teurelles 17 rue Girardet 29
	Fechas de los Estatutos
1	18.02.1983 20.12.1993
	Meta, Observaciones
	<u>Meta:</u> Estudio, desarrollo, producción y comercialización de aplicaciones de principios de la física y la biotecnología en la medicina, en particular de implantes y de instrumentos médicos. <u>Administración:</u> Uno o varios miembros

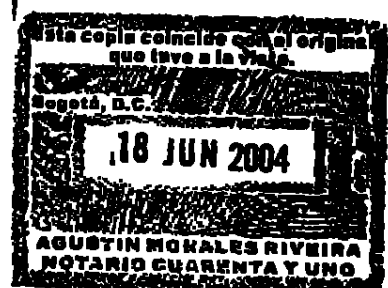


50

1	Organismo de publicidad- Modo de comunicación para los accionistas		
	FOCS		
	Capital - acciones		
	Nominal	Entrega	Acciones
1	CHF 4.850.100	CHF 4.850.100	16.167 acciones de CHF 300, nominativas

			Administradores, organismo de revisión y personas con calidad para firmar		
Insc	Mod	Rad	Nombre y apellido, origen, domicilio	Cargo	Modo de firma
1		4	Cherry Joseph A., des USA, en Mansfield, USA	Adm. Presidente	Firma individual
1		m 4	Bänziger Rolf, d'Heiden, en Schaffhouse	Adm. Vice-presidente	Firma individual
1		3	Dessales Jean Jacques, de Dombresson, en Brancs	Adm. Secretario	Firma colectiva en 2
		5	"Société Fiduciaire Suisse Coopers & Lybrand" S.A.", succursale en Neuchâtel	Revisor	Firma colectiva en 2
			Sullivan Christopher Arthur, des USA, en Neuchâtel	Director	Firma colectiva en 2
1		3	Legros Dominique Pierre Marie Joseph, de France, en Charquemont-F	Director	Firma colectiva en 2
2		3	Nagels Eric, de Saignelegier, en La Chaux-de-Fonds	Adm.	Firma colectiva en 2
			Oppliger Yves, de Rüttenbach im Emmental, en Neuchâtel		Procuración colectiva en 2
3			Manginelli Richard P., de Los Estados Unidos, en Dorchester, MA, USA	Adm. presidente	Firma colectiva en 2
			Hämmerli André, de Brüttelen, en La Chaux-de-Fonds	Adm. Vice-presidente	Firma colectiva en 2
	4		Bänziger Rolf, d' Heiden, en Schaffhouse	Adm.	Firma colectiva en 2
4			Matilde Chantal, de La Sagne, en Chézard-Saint-Martin		Procuración colectiva en 2
5			"PricewaterhouseCoopers S.A.", succursale en Neuchâtel	Revisor	

Clemente P. Pardo, C. U. de la
FACULTAD DE DERECHO, P. V. de la
FACULTAD DE DERECHO



51

REF	PERIÓDICO		PUBLICACIÓN		REF	PERIÓDICO		PUBLICACIÓN	
			FOSC					FOSC	
	Numero	Fecha	Fecha	Página		Número	Fecha	Fecha	Página
1	44	18.04.1995	28.04.1995	2342	2	2658	24.12.1996	24.12.1996	298
3	1962	10.08.2000	16.08.2000	5581	4	2348	11.10.2001	11.10.2001	8103
5	1967	11.07.2002	17.07.2002	8					

Neuchâtel, Abril 22 de 2004

COPIA CONFORME A LA ORIGINAL

ABRIL 22 DE 2004

EL PROPUESTO POR DELEGACIÓN

FIRMA (ILEGIBLE)

SIN DEL EXTRACTO

APOSTILLA

(Convenio de la Haya de Octubre de 1961)

1. País: Suiza

La presente acta Pública

2. Firmado por: Monique Riera

3. Actuando en calidad de: colaboradora especializada

4. Lleva el sello del Registro de Comercio de Neuchâtel

CERTIFICA

5. En Neuchâtel

6. El 27 de Abril de 2004

7. Por la Cancillería de Estado

8. No. 820

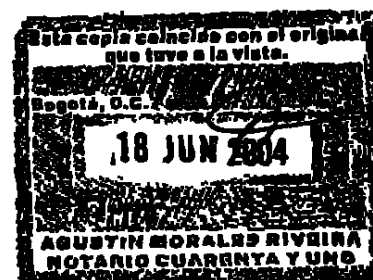
9. Sello

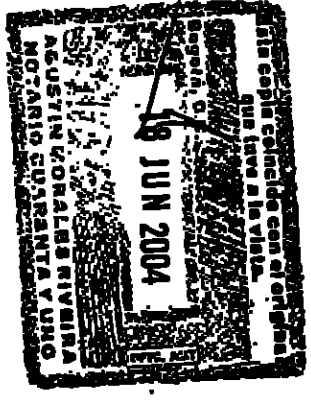
Republica y Cantón de Neuchâtel

10. Firma:

D. De Marco

Monique Riera
Cancillería de Estado
Neuchâtel, Suiza
27 de Abril de 2004





MINISTERIO DE
RELACIONES EXTERIORES

232478
Clemente Parades
CUYA FIRMA APARECE EN EL
DOCUMENTO DESEMPEÑA
LAS FUNCIONES INDICADAS

NO SE ASUME
RESPONSABILIDAD DEL TEXTO
2004 JUN -8 A 11:05
ues
JEFE DE LEGALIZACIONES
BOGOTÁ D.C.

T

T

T

T

52

T

□

POR MEDIO DEL PRESENTE CERTIFICAMOS QUE:

JONSON & JONSON DE COLOMBIA S.A.

YUMBO - VALLE / COLOMBIA

Esta autorizado por:

T**GIRARDET 29**

CH-2400 LE LOCLE

SUIZA

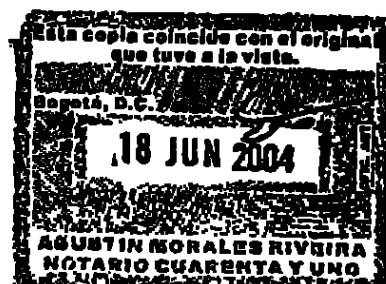
Para actuar como nuestro único agente para registrar, importar y vender: productos
MEDOS SA en el Colombia

T

Eric Nagels

Director de Finanzas

Cl. Marcelo Pineda Torda
1942, 1943, 1944, 1945, 1946, 1947, 1948
Res. No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829,





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LEGALIZACIÓN

Notario Publico del Cantón de Neuchâtel, Suiza, con oficina en La Chaux-de-Fonds certifica que la anterior firma fue escrita de su propia mano por Sr. Eric Nagels, de Saignelégier (JU) en La Chaux-de-Fonds (NE) Suiza y por Sr. André Hämmerli, de Brüttelen (BE), en La Chaux-de-Fonds (NE) Suiza, en representación de Medos S.A, residentes en Le Locle (Suiza), quienes son competentes para actuar y se presentaron personalmente ante el notario.

Certificado en la oficina del Notario Publico en Abril 23 del 2004

RGV 125, no. 123

APOSTILLE

(Convenio de la Haya de Octubre de 1961)

1. País: Suiza

Este documento Público

2. Firmado por Jean- Philippe Kernen

3. Actuando en calidad de: Notario

4. Lleva el sello de Jean- Philippe Kernen, Notario en La Chaux-de-Fonds/ Canton de Neuchâtel/ Suiza

CERTIFICA

5. En Neuchâtel

6. El 27/04/2004

7. Por la Chancillería de Estado

8. Bajo el No. 828

9. Sello

10. Firma:

Cancilleria de Estado

D. De Marco

Chancilleria de Estado
27/04/2004
828

ES

MINISTERIO DE
RELACIONES EXTERIORES

NO SE ASUME
RESPONSABILIDAD DEL TEXTO

732479

2004 JUN - 8 A 11: 05

Cherman Paredes

Mez

CUYA FIRMA APARECE EN EL
DOCUMENTO DESEMPEÑA
LAS FUNCIONES INDICADAS

JEFE DE LEGALIZACIONES
OGCOTA II.C.



PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference (if desired) (12 characters maximum) BFM/ph/13576-PCT

Box No. I TITLE OF INVENTION

Method of setting and actuating a multi-stable micro valve and adjustable micro valve

Box No. II APPLICANT

☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

MEDOS S.A.
29, Rue Girardet
2400 LE LOCLE
SWITZERLAND

Telephone No.

Facsimile No

Teleprinter No.

Applicant's registration No. with the Office

State (that is, country) of nationality:
SWITZERLAND

State (that is, country) of residence:
SWITZERLAND

This person is applicant for the purposes of:

☐ all designated States

☒ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

GINGGEN Alec
Rauenmattenweg 7
3225 MÜNTSCHEMIER
SWITZERLAND

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:
SWITZERLAND

State (that is, country) of residence:
SWITZERLAND

This person is applicant for the purposes of:

☐ all designated States

☐ all designated States except the United States of America

☒ the United States of America only

☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

MICHEL & CIE
122, rue de Genève
CP 61
1226 THONEX
SWITZERLAND

Telephone No.

022.348.49.89

Facsimile No.

022.348.49.38

Teleprinter No.

Agent's registration No. with the Office

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box No. V DESIGNATION OF STATES

Mark the applicable check-boxes below; at least one must be marked.

The following designations are hereby made under Rule 4.9(a):

Regional Patent

- ☒ **AP** ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (if other kind of protection or treatment desired, specify on dotted line)
- ☒ **EA** Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ **EP** European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ **OA** OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line)

- | | | |
|---|--|--|
| ☒ AE United Arab Emirates | ☒ GM Gambia | ☒ NZ New Zealand |
| ☒ AG Antigua and Barbuda | ☒ HR Croatia | ☒ OM Oman |
| ☒ AL Albania | ☒ HU Hungary | ☒ PH Philippines |
| ☒ AM Armenia | ☒ ID Indonesia | ☒ PL Poland |
| ☒ AT Austria & .utilit.mod. | ☒ IL Israel | ☒ PT Portugal |
| ☒ AU Australia | ☒ IN India | ☒ RO Romania |
| ☒ AZ Azerbaijan | ☒ IS Iceland | ☒ RU Russian Federation |
| ☒ BA Bosnia and Herzegovina | ☒ JP Japan | |
| ☒ BB Barbados | ☒ KE Kenya | ☒ SD Sudan |
| ☒ BG Bulgaria | ☒ KG Kyrgyzstan | ☒ SE Sweden |
| ☒ BR Brazil | ☒ KP Democratic People's Republic of Korea | ☒ SG Singapore |
| ☒ BY Belarus | ☒ KR Republic of Korea | ☒ SI Slovenia |
| ☒ BZ Belize | ☒ KZ Kazakhstan | ☒ SK Slovakia & utility model |
| ☒ CA Canada | ☒ LC Saint Lucia | ☒ SL Sierra Leone |
| ☒ CH & LI Switzerland and Liechtenstein | ☒ LK Sri Lanka | ☒ TJ Tajikistan |
| ☒ CN China | ☒ LR Liberia | ☒ TM Turkmenistan |
| ☒ CO Colombia | ☒ LS Lesotho | ☒ TN Tunisia |
| ☒ CR Costa Rica | ☒ LT Lithuania | ☒ TR Turkey |
| ☒ CU Cuba | ☒ LU Luxembourg | ☒ TT Trinidad and Tobago |
| ☒ CZ Czech Republic & .utilit.mod. | ☒ LV Latvia | ☒ TZ United Republic of Tanzania |
| ☒ DE Germany & .utilit.model. | ☒ MA Morocco | ☒ UA Ukraine |
| ☒ DK Denmark & .utilit.model. | ☒ MD Republic of Moldova | ☒ UG Uganda |
| ☒ DM Dominica | | ☒ US United States of America |
| ☒ DZ Algeria | ☒ MG Madagascar | |
| ☒ EC Ecuador | ☒ MK The former Yugoslav Republic of Macedonia | ☒ UZ Uzbekistan |
| ☒ EE Estonia & .utility.model. | ☒ MN Mongolia | ☒ VN Viet Nam |
| ☒ ES Spain | ☒ MW Malawi | ☒ YU Yugoslavia |
| ☒ FI Finland & .utility.model. | ☒ MX Mexico | ☒ ZA South Africa |
| ☒ GB United Kingdom | ☒ MZ Mozambique | ☒ ZM Zambia |
| ☒ GD Grenada | ☒ NO Norway | ☒ ZW Zimbabwe |
| ☒ GE Georgia | | |
| ☒ GH Ghana | | |

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

- | | | |
|--------------------------------|--------------------------------|--------------------------------|
| ☐ | ☐ | ☐ |
| ☐ | ☐ | ☐ |

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office
item (1) 6 October 2001 (06.10.01)	01123923.3		EP	
item (2)				
item (3)				
item (4)				
item (5)				

☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

☐ all items
 ☐ item (1)
 ☐ item (2)
 ☐ item (3)
 ☐ item (4)
 ☐ item (5)
 ☐ other, see Supplemental Box

* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)):

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / EP

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

Box No. VIII DECLARATIONS

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of
declarations

- | | | |
|---|--|---|
| ☐ Box No. VIII (i) | Declaration as to the identity of the inventor | : |
| ☐ Box No. VIII (ii) | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent | : |
| ☐ Box No. VIII (iii) | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | : |
| ☐ Box No. VIII (iv) | Declaration of inventorship (only for the purposes of the designation of the United States of America) | : |
| ☐ Box No. VIII (v) | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty | : |

Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items
(a) the following number of sheets in paper form:		
request (including declaration sheets) : 4	1. ☒ fee calculation sheet :	1
description (excluding sequence listing part) : 11	2. ☐ original separate power of attorney :	
claims : 3	3. ☐ original general power of attorney :	
abstract : 1	4. ☐ copy of general power of attorney; reference number, if any:	
drawings : 4	5. ☐ statement explaining lack of signature :	
Sub-total number of sheets : 23	6. ☒ priority document(s) identified in Box No. VI as item(s):	1
sequence listing part of description (actual number of sheets if filed in paper form, whether or not also filed in computer readable form: see (b) below) :	7. ☐ translation of international application into (language):	
Total number of sheets : 23	8. ☐ separate indications concerning deposited microorganism or other biological material	
(b) sequence listing part of description filed in computer readable form	9. ☐ sequence listing in computer readable form (Indicate also type and number of carriers (diskette, CD-ROM, CD-R or other))	
(i) ☐ only (under Section 801(a)(i))	(i) ☐ copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application)	
(ii) ☐ in addition to being filed in paper form (under Section 801(a)(ii))	(ii) ☐ (only where check-box (b)(i) or (b)(ii) is marked in left column) additional copies including, where applicable the copy for the purposes of international search under Rule 13ter	
Type and number of carriers (diskette, CD-ROM, CD-R or other) on which the sequence listing part is contained (additional copies to be indicated under item 9(ii), in right column):	(iii) ☐ together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column :	
	10. ☐ other (specify):	
Figure of the drawings which should accompany the abstract: 5	Language of filing of the international application: English	

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

MICHEL & CIE
Bertrand-François MICHEL

Genève, le 30 septembre 2002

For receiving Office use only	
1. Date of actual receipt of the purported international application:	2. Drawings: ☐ received: ☐ not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):	
5. International Searching Authority (if two or more are competent): ISA /	6. ☐ Transmittal of search copy delayed until search fee is paid
For International Bureau use only	
Date of receipt of the record copy by the International Bureau:	

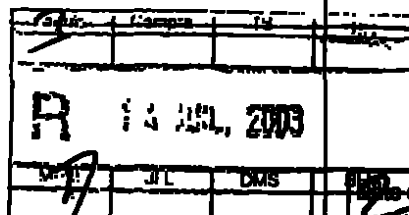
PATENT COOPERATION TREATY

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From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

MICHEL, Michel-Pierre
MICHEL & CIE
122, rue de Genève
Case postale 61
CH-1226 Thonex
SUISSE



PCT

WRITTEN OPINION

(PCT Rule 66)

Applicant's or agent's file reference

MPM/ph/13576-PCT

REPLY DUE

within 3 month(s)
from the above date of mailing

International application No.

PCT/IB02/03999

International filing date (day/month/year)

30/09/2002

Priority date (day/month/year)

06/10/2001

International Patent Classification (IPC) or both national classification and IPC

F15C5/00

Applicant

MEDOS S.A. et al.

1. This written opinion is the second drawn up by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- VI ☐ Certain document cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 66.2 is: 06/02/2004.

10 8 03
10 10 03 04

Name and mailing address of the international preliminary examining authority:

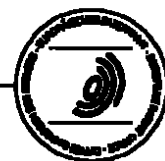
 European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tlx 523656 epmu d
Fax: +49 89 2399 - 4485

Authorized officer / Examiner

Busto, M

Formalities officer (incl. extension of time limits)

Murphy-Minehane, B
Telephone No. +49 89 2399 2753



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WRITTEN OPINION

International application No. PCT/IB02/03999

I. Basis of the opinion

1. With regard to the elements of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"):

Description, pages:

1-11 as originally filed

Claims, No.:

1-10 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

WRITTEN OPINION

International application No. **PCT/IB02/03999**

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):
(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement

1. Statement	
Novelty (N)	Claims 1,2,4,6,8
Inventive step (IS)	Claims 1-10
Industrial applicability (IA)	Claims

2. Citations and explanations
see separate sheet

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Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: WO 99 39118 A (UNIV MICHIGAN ;GRUMMON DAVID S (US)) 5 August 1999 (1999-08-05)

D3: US-A-5 619 177 (BLOCK BARRY ET AL) 8 April 1997 (1997-04-08)

1. The present application does not satisfy the criterion set forth in Article 33(2) PCT because the subject-matter of independent claims 1, 2 and 4 is not new in respect of the prior art as defined in the regulations (Rule 64(1)-(3) PCT).

1.1. Document D1 discloses a microvalve presenting an operating method as follows (see in particular D1, page 3, line 10- page 4, line 4; page 6, line 7 - page 7, line 25; page 8, lines 23-25, figures 1-3, 7, 8; reference numbers in parentheses referring to this document):

cooling an array of actuating members (12, 212) made of SMA material, to a temperature equal or below the temperature at which a transformation from austenitic to martensitic state occurs so that the entire array of SMA actuating members (12) is either fully or partially in the martensitic state, selecting at least one of the actuating members (12) corresponding to a pre-determined opening pressure or resistance to flow, heating individually each of the actuating members (12) except the previously selected member to a temperature equal or above to the temperature at which a transformation from the martensitic state to the austenitic state occurs.

1.2. With reference to Independent method claim 2 : the subject-matter of claim 2 is also implicitly disclosed by document D1.

2. With reference to independent claim 4 : document D3 discloses (see in particular column 3, line 52- column 6, line 17; column 7, line 36- column 8, line 18; column 8, lines 47- 56; figures 1A, 1B, 5; reference numbers in parentheses referring to this document):

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**WRITTEN OPINION
SEPARATE SHEET**

International application No. PCT/IB02/03999

An adjustable micro valve (10) comprising a base element (34) with at least one passage (18) for the fluid flow, at least one array of actuating members (12) made of a SMA material arranged on one of the base plate face and means (46) for cooling said array of actuating members (12), and comprising heating means (44) for heating the actuating members (12).

2.1. Document D1 too discloses an adjustable micro valve with the features of Claim 4

2.2. The subject-matter of claim 4 is therefore also not new in respect of the prior art as defined in the regulations (Rule 64(1)-(3) PCT).