



Industria y Comercio
SUPERINTENDENCIA

Delegatura de Propiedad Industrial

División de Nuevas Creaciones

PCT
SOLICITUD

PATENTE DE INVENCION

05-11185

21. EXPEDIENTE No.

54. TITULO

SUELA IMPERMEABLE Y TRANSPIRANTE PARA CALZADOS

51. CLASIFICACION INTERNACIONAL

71. SOLICITANTE

GEOX S.P.A.

DOMICILIO

Motebelluna, Localita Biadene, Italia.

74. APODERADO

EMILIO FERRERO

C.C. 438.019 de Usaquén.

22. BOGOTA, D.C.,


Industria y Comercio

SUPERINTENDENCIA

PETITORIO

SUPERINDUSTRIA Y COMERCIO

Radicación : 05011185 00000000

Folios: 68ación

Fecha (AMD): 2005-02-04 17:29:06

Trámite : 011 PCT-PATENT 379 FASE NACI 411 PRESENTAC

Dependencias: 2020 DIVISION DE NUEVAS CREACIONES

FORMULARIO UNICO DE S
PCT
ENTRADA EN FASE NACIONAL

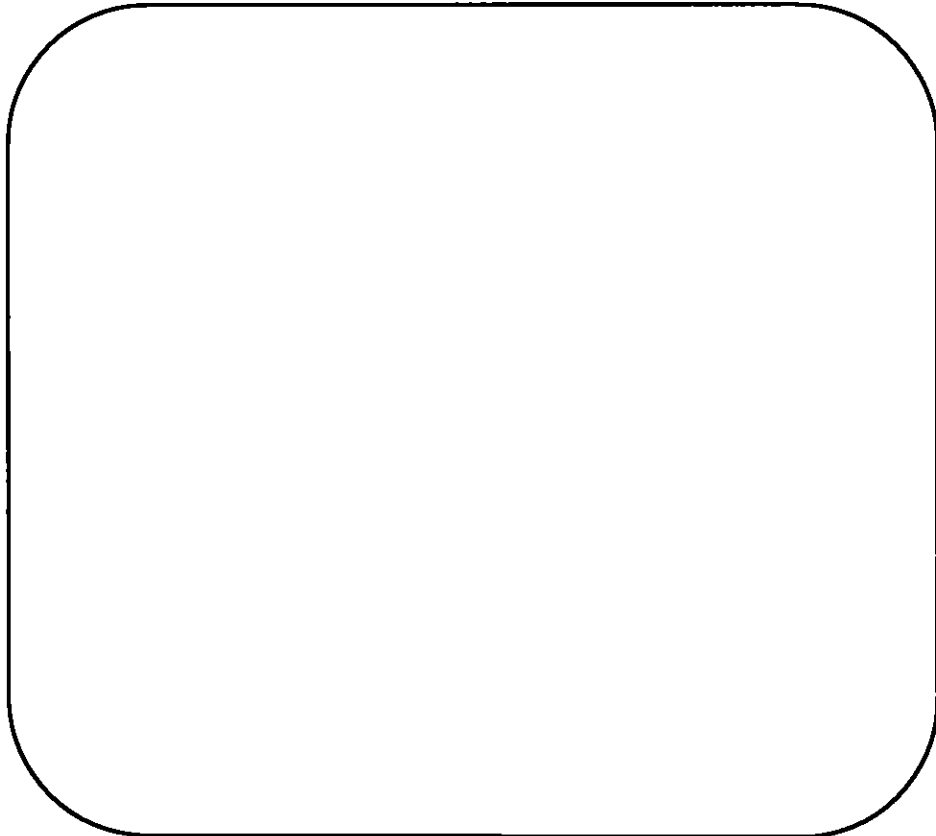
1 SOLICITUD DE:			
☒ Patente de Invención.		☐ Patente de Modelo de Utilidad.	
☐ Capítulo I.		☒ Capítulo II.	
2 SOLICITANTE (71)	Nombre: GEOX S.P.A. sociedad constituida y existente bajo las leyes de Italia Dirección: Via Feltrina Centro, 18, 31044 Montebelluna, Località Biadene - (Treviso) Italia Domicilio: Montebelluna, Località Biadene, Italia	IDENTIFICACION C.C. ☐ NIT ☐ C.E. ☐ Otro ☐ Cual _____ Número: _____	
3 REPRESENTANTE O APODERADO	Nombre: EMILIO FERRERO Dirección: Carrera 4ª. No. 72-35 Teléfono: 347 36 11 Fax: 217 92 11 E-mail: <u>clientes@camyp.com.</u> Domicilio: Bogotá, Colombia.	IDENTIFICACION C.C. ☒ NIT ☐ C.E. ☐ Otro ☐ Cual _____ Número: <u>438.019</u> T.P. <u>31.929</u>	
4 INVENTOR (ES) (72)	1. Mario POLEGATO MORETTI Via Antonini, 7 31035 Crocetta del Montello, Italia 2. Antonio FERRARESE Via Rimembranza, 23, 37063 Isola della Scala, Italia		
5 PCT (86) Solicitud Internacional No. <u>PCT/EP2003/007273</u> Fecha: <u>07 de julio de 2003</u> Publicación Interancional No. <u>WO 2004/004505 A1</u> Fecha: <u>15 de enero de 2004</u>			
6 Título (54) SUELA IMPERMEABLE Y TRANSPIRANTE PARA CALZADOS			
7 Clasificación Internacional (51) <u>A43B 7/12</u>			
8 Prioridad SI ☒ NO ☐	(33) País de Origen _____ IT.	(32) Fecha <u>09 de julio de 2002</u>	(31) Número de Solicitud <u>PD2002A000187</u>
9 Comprobante de pago No.: <u>05 - 4.991</u> Fecha: <u>24 de enero de 2004</u>			

10

Anexos:

- ☒ Comprobante de pago de la tasa de presentación de la solicitud por \$ 443.000.00.
- ☐ Comprobante de pago por reivindicación de prioridad.
- ☒ Documento que acredita la existencia y representación legal cuando el solicitante sea persona jurídica.
- ☒ Poderes, si fuere el caso.
- ☒ Documento de cesión del inventor al solicitante o a su causante.
- ☐ Declaraciones.
- ☒ Copia de la solicitud internacional. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Traducción de la solicitud internacional al castellano. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Copia del examen preliminar efectuado por la IPEA.
- ☒ Traducción del examen preliminar efectuado por la IPEA.
- ☐ De ser el caso, copia del contrato de acceso.
- ☐ De ser el caso, documento que acredite la licencia o autorización de uso de conocimientos tradicionales de las comunidades indígenas.
- ☐ De ser el caso, certificado de depósito del material biológico.
- ☐ Arte final 12x12
- ☐ De ser el caso, información sobre otras solicitudes de patente o títulos obtenidos en el extranjero por el mismo titular o su causante, relacionadas parcial o totalmente con la invención de esta solicitud.
- ☐ Otros

11

FIGURA CARACTERISTICA:

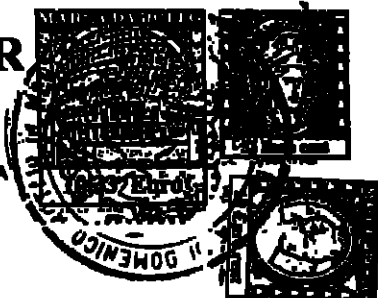
12

Solicito la concesión de la patente,

NOMBRE: EMILIO FERRERO

FIRMA :

C.C. 438.019 de Usaquén T.P. 31.929



Representación y Poder con autenticación notarial y Apostille para patentes, modelos de utilidad, diseños industriales; marcas de fábrica, nombres comerciales, enseñas, nombres de dominio, lemas comerciales, licencias.

Rappresentazione e Procura con autenticazione notarile e Apostille per di patenti, modelli di utilità, disegni industriali; marchi di fabbrica, nomi commerciali, insegne, nomi del dominio, slogan commerciali, licenze.

REPRESENTACION Y PODER

RAPPRESENTAZIONE E PROCURA

Yo (nosotros), abajo firmado(s)/lo (noi) sottoscritto (i)

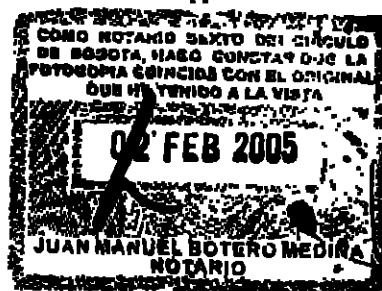
GEOX S.p.A.

domiciliado (s) en/residente(i) a **Via Feltrina Centro, 16**

31044 MONTEBELLUNA, Località Biadene - (Treviso) - ITALIA

por el presente nombramos a EMILIO FERRERO, tpa. 31929; GONZALO PERDOMO, tpa. 831; LUZ CLEMENCIA DE PAEZ, tpa. 23555 y GERMAN CAVELIER, tpa. 832, domiciliados en la Carrera 4a N° 72-35, Bogotá, Colombia, en obediencia a lo dispuesto en el parágrafo 1o del Artículo 543 del Código de Comercio, el primero como principal y los demás como suplentes, en su orden, como mis (nuestros) representantes en todos los asuntos de propiedad industrial con facultad para recibir notificaciones y nombrar apoderados judiciales o extrajudiciales. El primer representante suplente reemplazará al principal en caso de ausencia o impedimento temporal o definitivo de aquél. La misma regla se aplicará cuando el segundo representante suplente haya de reemplazar al primero, o el tercero al segundo. En tales casos, el representante principal, o el primero, o segundo suplente, en su caso, o ambos, declararán su intención de no ejercer la representación mediante declaración autenticada por Notario Público en Colombia, o por Notario u otro Funcionario Público, o Cónsul de Colombia, en el extranjero; y si se tratare de impedimento, con el certificado respectivo. Si alguno de los nombrados faltare definitivamente, el siguiente tomará su lugar. Cuando cesare la ausencia o impedimento del representante principal, o de su primero o segundo suplentes, en su caso, podrán ejercer la representación, en su orden, uno u otros según el caso, asumiéndola por el solo hecho de ejercerla, cesando en ese momento el ejercicio de la representación por el primero, segundo o tercer suplente en su caso.

per mezzo del presente documento nominiamo nostro procuratore a EMILIO FERRERO, tpa. 31929; GONZALO PERDOMO, tpa. 832; LUZ CLEMENCIA DE PAEZ, tpa. 23555 ed GERMAN CAVELIER, tpa. 831, domiciliati nella Carrera 4a N° 72-35, Bogotá, Colombia, ai sensi del paragrafo 1 dell'articolo 543 del Codice del Commercio, come nostri rappresentanti, principale il primo e supplenti gli altri, nell'ordine sopra indicato, in tutti gli affari relativi a proprietà industriale, con la facoltà di ricevere notificazioni e di nominare procuratori giudiziari o estragiudiziali. Il primo rappresentante supplente sostituirà il rappresentante principale in caso di assenza o di impedimento temporaneo o definitivo di costui. La stessa regola verrà applicata qualora il primo rappresentante supplente dovesse venire sostituito dal secondo, o il secondo dal terzo. In tali casi il rappresentante principale, o il primo o il secondo supplente in sua vece, o ambedue, dichiareranno la loro intenzione di non esercitare la rappresentazione mediante una dichiarazione autenticata da un Notaio Pubblico in Colombia, o da un Notaio o altro Funzionario Pubblico, o dal Console colombiano, all'estero; qualora si trattasse di impedimento, andrà presentato il certificato corrispondente. Se qualcuno dei nominati mancasse in forma definitiva, il suo posto verrà preso dal seguente. Quando sarà cessata l'assenza del rappresentante principale, o del primo, secondo o terzo supplente in sua vece, la rappresentazione potrà essere esercitata a seconda del caso e nell'ordine summenzionato dagli altri avvocati nominati, i quali la assumeranno per il semplice fatto di esercitarla e in quel momento il primo, il secondo o il terzo supplente - a seconda del caso - cesseranno di esercitare la rappresentazione.



Además, confiero (conferimos) poder a los abogados arriba nombrados, para obtener la protección de mi (nuestra) propiedad industrial y contra la competencia desleal, a cuyo efecto autorizo (amos) a los dichos apoderados para que me (nos) representen ante cualesquiera entidades o personas, ejerzan o no jurisdicción, especialmente ante las del orden administrativo, contencioso-administrativo y judicial, así como los tribunales de arbitramento, en todo lo concerniente a los siguientes asuntos: a) Obtención de patentes de invención, modelos de utilidad y diseños industriales; el registro de marcas de fábrica, colectivas, defensivas, de servicio, lemas comerciales, nombres comerciales, enseñas, nombres de dominio, variedades vegetales y denominaciones de origen; su renovación, traspaso, cambio de nombre o domicilio, cancelación voluntaria; y el registro de licencias de uso de esos derechos; b) Las acciones de competencia desleal, protección del consumidor, oposiciones u observaciones, cancelación administrativa y judicial, nulidad, medidas cautelares, concesión de licencias, la tutela, la protección de secretos industriales, y en general los juicios civiles, penales, administrativos o contencioso administrativos relacionados con estos derechos; acciones y procesos que promovamos o se nos promuevan. Y para que en todos los asuntos arriba determinados, puedan sustituir este mandato, transigir, conciliar, admitir los hechos del proceso, desistír, cancelar, recibir, renunciar, y ratificar los actos de agentes oficiosos.

Inoltre concediamo agli avvocati suddetti l'incarico per ottenere la protezione della mia (nostra) proprietà industriale e contro la concorrenza sleale; a questo fine autorizzo(iamo) le persone menzionate affinché mi (ci) rappresentino presso qualsiasi entità o persona, esercitino o no giurisdizione, specialmente presso quelle d'ordine amministrativo, contencioso-amministrativo, arbitrale e giudiziale, in tutto ciò che si riferisce ai seguenti incisi; a) conseguimento delle patenti di invenzione, modelli di utilità, disegni industriali; il deposito dei marchi di fabbrica, collettivi, difesa, di servizio, slogan commerciali, nomi commerciali, delle insegne, nomi del dominio, varietà vegetale e denominazioni di origine; il loro rinnovamento, trasferimento, cambio di nomi o di domicilio, l'annullamento volontario, e il permesso delle licenze per l'uso di questi diritti; b) gli atti di concorrenza sleale, protezione del consumatore, opposizione, annullamento amministrativo e giudiziale, nullità, caducità, misure cautelative, concessione di licenze, tutelare i diritti, la protezione dei segreti industriali, ed in generale le cause civili, penali, amministrative o contenzioso amministrative riferentesi a questi diritti; azioni o cause promosse da noi o che siano dirette contro di noi; e c) affinché, in tutti i punti sopra indicati, possano sostituire questo mandato, transigere, conciliare, ammettere i fatti del processo, desistere, e ratificare quanto attuato da rappresentanti non ufficiali.

Dado y firmado hoy/Rilasciato e firmato oggi

16 DIC 2004

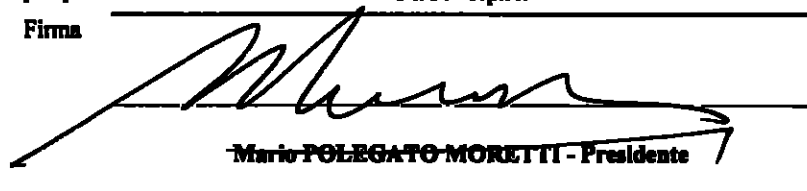
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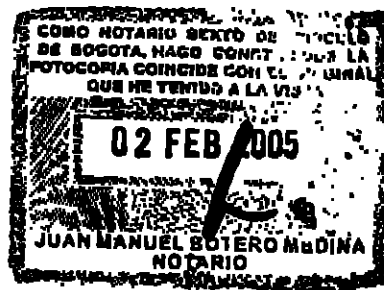
MONTECELLUNA

por/per

GEON S.p.A.

Firma


Mario POLEGATO MORETTI - Presidente



CAVELIER ABOGADOS
WPP0DE01-186

CERTIFICACION NOTARIAL (SOCIEDAD)

El infrascrito Notario Certifica: Que la firma que antecede de
es auténtica; que el signatario desempeña actualmente el cargo de

de la compañía

sociedad que actualmente existe y está organizada de acuerdo a
las leyes de

que la dirección de dicha compañía es

y que el signatario tiene facultad para otorgar este documento.

Todos los hechos anteriores le constan por haber examinado
los documentos respectivos y de todo ello da fe.

Dado y firmado en

10 de mayo del mes de mayo de 2004

CERTIFICATO NOTARILE (SOCIETA)

Il sottoscritto Notaio certifica: Che la firma che precede di

MARIO POLEGATO MORETTI

è autentica; che il firmatario attualmente svolge le funzioni di

PRESIDENTE

della compagnia

GEOX S.p.A.

società che attualmente esiste ed è organizzata in conformità con le
leggi di

ITALIA

che l'indirizzo di detta compagnia è

Via Feltrina Centro, 16

31044 MONTEBELLUNA, Località Biadene - (Treviso) - ITALIA

e che il firmatario ha la facoltà di rilasciare questo documento.

Tutti i fatti anteriori gli constano perché ha esaminato i documenti
rispettivi e di tutto ciò dà fede.

Rilasciato e firmato a MONTEBELLUNA

il 10 del mese di maggio 2004

EL NOTARIO PÚBLICO - IL NOTAIO PUBBLICO
(FIRMA-BELLO) - (FIRMA-TIMBRO)

[Handwritten signature and circular notary stamp]

**REPUBBLICA ITALIANA
PROCURA DELLA REPUBBLICA C/O IL TRIBUNALE
TREVISO**

**UFFICIO LEGALIZZAZIONI
APOSTILLE**

Il presente atto pubblico è stato sottoscritto da:
ELIA NOVELLI

- agente in qualità di Notario in
Montebelluna
- ed è stato segnato dal timbro personale del suddetto
Notario

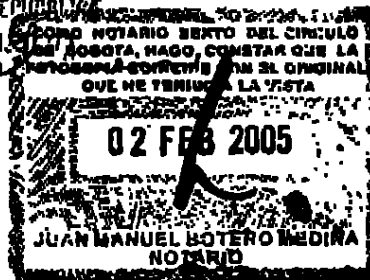
ATTESTATO 28 DIC. 2004
a Treviso - Procura della Repubblica - il
dal Procuratore della Repubblica - sotto il nr. 160104
nel Registro Apostille - (Convenzione AJA 5/10/81).

IL PROCURATORE DELLA REPUBBLICA

IL SOTT. PROCURATORE DELLA REPUBBLICA

(Dott. Giovanni Valmancosa)

CAVELIER ABOGADOS
WPP00ED1-186



6

TRADUCCIÓN OFICIAL No. 998 A-III, del idioma Italiano al idioma Español correspondiente a la apostilla que aparece en el documento de Representación y Poder otorgado por GEOX, S.p.A, domiciliado en Via Feltrina Centro, 16 – 31044 Montebelluna, Localita Biadene - / Treviso)-Italia; a Emilio Ferrero, tpa. 31929, Gonzalo Perdomo, tpa. 831, Luz Clemencia de Páez, tpa. 23555 y Germán Cavelier, tpa. 832, domiciliados en la Cra. 4 No. 72-35, Bogotá, Colombia; realizada por SANDRA MÓNICA BARRIGA BALMA traductora Oficial para los idiomas Español – Italiano - Español, RES. No. 735 del 20 de SEPTIEMBRE DE 2001 DEL MINISTERIO DEL INTERIOR Y DE JUSTICIA.

REPÚBLICA ITALIANA
PROCURADURÍA DE LA REPÚBLICA C/O EL TRIBUNAL
TREVISO – DESPACHO DE LEGALIZACIONES
APOSTILLA

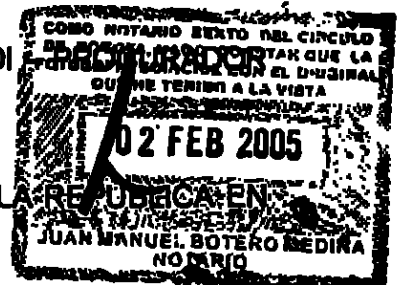
EL PRESENTE ACTO PÚBLICO FUE SUSCRITO POR ELIA NOVELLI
ACTUANDO EN CALIDAD DE NOTARIO EN MONTEBELLUNA
FUE SELLADO CON EL SELLO PERSONAL DEL MENCIONADO NOTARIO.

CERTIFICADO

EN TREVISO – PROCURADURÍA DE LA REPÚBLICA EL 28 DE DICIEMBRE
DE 2004 POR EL PROCURADOR DE LA REPÚBLICA, BAJO EL NUMERO
1601/04 DEL REGISTRO DE APOSTILLAS – (CONVENCIÓN DE LA HAYA
5/10/61)

FIRMADO ILEGIBLE POR EL DR. GIOVANNI VALMASSOI
DE LA REPÚBLICA

SIGUE SELLO REDONDO DE LA PROCURADURÍA DE LA REPÚBLICA EN
EL TRIBUNAL DE TREVISO.



SANDRA MONICA BARRIGA B.
Traductora e Intérprete Oficial
Español - Italiano - Español
Res. Minjusticia 735
Del 20 de Septiembre de 2001
Sandra Barriga Balma

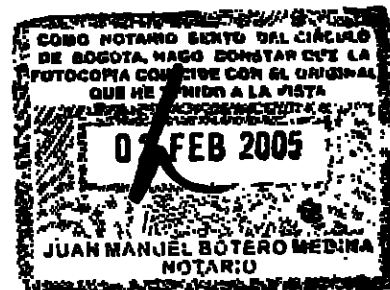
NO SE ASUME
RESPONSABILIDAD DEL TEXTO

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ues
JEFE DE LEGALIZACIONES
BOGOTÁ D.C.

MINISTERIO DE
RELACIONES EXTERIORES

310531
Sandoz B. mfg
CUNTA FIRMA AFARECE EN EL
DOCUMENTO DESEMPEÑA
LAS FUNCIONES INDICADAS



CAVELIER

ABOGADOS
EDIFICIO SISKI
CARRERA 4a N° 72-35
BOGOTÁ, 8 - COLOMBIA



28
373



COLO 13377 241 0018

1-10

CESION

Yo, (nosotros) abajo firmado (s)

1. Mario POLEGATÒ MORETTI
2. Antonio FERRARESE

domiciliado(s) en

1. Via Antonini, 7
31035 Crocetta del Montello
Italia

2. Via Rimembranza, 23
37063 Isola Della Scala, Italia

declaro(amos) bajo juramento ser único(s) y verdadero(s) inventor(es)

de la invención: Suela impermeable y transpirante
para calzados

declaro(amos) así mismo que cedo(amos) y transfiero(emos), sin limitación, a favor de la sociedad

Geox S.P.A.

constituida y existente de conformidad con las leyes de Italia

domiciliada en Via Feltrina Centro, 16

31044 Montebelluna, Località Biadene - (Trevise) Italia

todos los derechos inherentes a dicha invención y que la citada Compañía queda facultada para solicitar en su nombre la patente de invención correspondiente en la República de Colombia.

Dado y firmado hoy/Rilasciato e firmato oggi

en/s MONTEBELLUNA

Firma

1. Mario POLEGATO MORETTI

© CAVELIER ABOGADOS
WPPODE01- 373

CESSIONE

Lo (noi) sottoscritto(-i)

1. Mario POLEGATO MORETTI
2. Antonio FERRARESE

domiciliato (-i) a

1. Via Antonini, 7
31035 CROCETTA DEL MONTELLO
ITALIA

2. Via Rimembranza, 23
37063 ISOLA DELLA SCALA - ITALIA

Dichiaro (dichiariamo) sotto giuramento di essere l'unico (gli unici) inventore (-i) dell'invenzione Struttura di suola
Impermeabile e traspirante per calzature

Dichiaro (dichiariamo) anche che cedo (cediamo) e trasferisco (trasferiamo), senza nessuna limitazione, a favore della società

GEOX S.P.A.

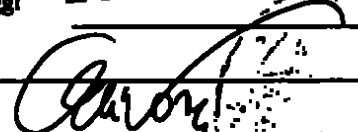
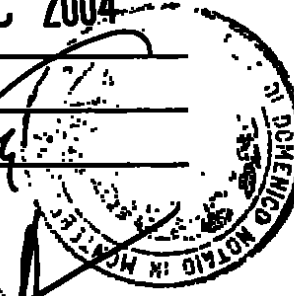
Costituita ed esistente in conformità con le leggi dello Stato di Italia

domiciliata a Via Feltrina Centro, 16

31044 MONTEBELLUNA, Località Biadene - (Trevise) - ITALIA

Tutti i diritti riguardanti la suddetta invenzione e che la summenzionata Compagnia ha la facoltà di richiedere a suo nome il brevetto corrispondente nella Repubblica della Colombia.

28 DIC 2004



2. Antonio FERRARESE

CERTIFICACIÓN NOTARIAL (INDIVIDUO)

A los _____ días del mes de _____
de 200 ____ Ante mí, Notario Público de _____

compareció(eron) personalmente _____

a quien(es) doy fe de conocer y me consta que es(son) la(s)
persona(s) firmante(s) del documento que precede, y quien(es)
tiene(n) capacidad legal para otorgarlo

AUTENTICAZIONE NOTARILE

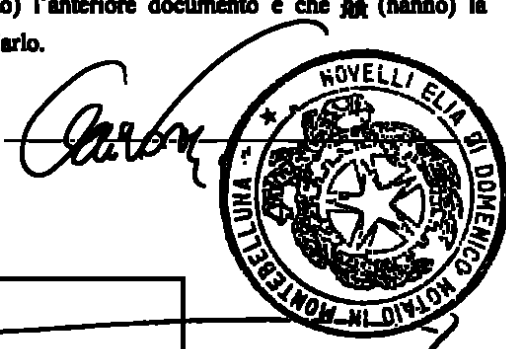
Il
giorno ventotto del mese di dicembre
200⁴ _____ dinanzi a me, Notaio Pubblico di Montebelluna
Dott. ELIA NOVELLI

si è presentato (si sono presentati) personalmente

- POLEGATO MORETTI MARIO nato a Crocetta del M. llo 16.8.52

- FERRARESE ANTONIO nato a Isola della Scala 11.04.1966
che certifico di conoscere e che ~~è~~(sono) ~~la~~ (le) persona (-e) che
~~autografa~~ (sottoscrivono) l'antecedente documento e che ~~ha~~ (hanno) la
capacità legale per rilasciarlo.

NOTARIO PÚBLICO- NOTAIO PUBBLICO



APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Country:
This public document
2. has been signed by
3. acting in the capacity of
4. bears the seal/stamp of

see reverse side

Certified

5. at 6. the
7. by
8. No.
9. Seal/stamp 10. Signature

.....

REPUBBLICA ITALIANA
PROCURA DELLA REPUBBLICA C/O IL TRIBUNALE
TREVISO

UFFICIO LEGALIZZAZIONI
APOSTILLE

Il presente atto pubblico è stato sottoscritto dal
ELIA NAELLI

- agente in qualità di Notaio in
Montebelluna
- ed è stato segnato dal timbro personale del suddetto
Notaio

ATTESTATO

a Treviso - Procura della Repubblica - il 12 GEN. 2005
dal Procuratore della Repubblica - sotto il nr. 2105
del Registro Apostille - (Convenzione AJA 5/10/81).

IL PROCURATORE DELLA REPUBBLICA

Antonio Fojadelli

Antonio Fojadelli



9

TRADUCCIÓN OFICIAL No. 996 B-III, del idioma Italiano al idioma Español correspondiente a la apostilla que aparece en el documento mediante el cual 1. Mario Polegato Moretti y 2. Antonio Ferrarase, domiciliados en 1. Via Antonini, 7 31035 Crocetta del Montillo – Italia y 2. Via Remembranza, 23 37063 Isola Della Scala, Italia; inventores de la “Suela Impermeable y transpirante para calzados”, ceden los derechos de dicha invención a Geox S.P.A., domiciliado en Via Feltrina Centro, 16 – 31044 Montebelluna, Localita Biadene - / Treviso)-Italia; realizada por SANDRA MÓNICA BARRIGA BALMA traductora Oficial para los idiomas Español – Italiano - Español, RES. No. 735 del 20 de SEPTIEMBRE DE 2001 DEL MINISTERIO DEL INTERIOR Y DE JUSTICIA.

REPÚBLICA ITALIANA

PROCURADURÍA DE LA REPÚBLICA C/O EL TRIBUNAL

TREVISO – DESPACHO DE LEGALIZACIONES

APOSTILLA

EL PRESENTE ACTO PÚBLICO FUE SUSCRITO POR ELIA NOVELLI
ACTUANDO EN CALIDAD DE NOTARIO EN MONTEBELLUNA
FUE SELLADO CON EL SELLO PERSONAL DEL MENCIONADO NOTARIO.

CERTIFICADO

EN TREVISO – PROCURADURÍA DE LA REPÚBLICA EL 12 DE ENERO DE
2005, POR EL PROCURADOR DE LA REPÚBLICA, BAJO EL NÚMERO 8/05
DEL REGISTRO DE APOSTILLAS – (CONVENCIÓN DE LA HAYA 5/10/61)
FIRMADO ILEGIBLE POR ANTONIO FOJADELLI – PROCURADOR DE LA
REPÚBLICA
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: WATERPROOF AND BREATHABLE SOLE FOR SHOES

(57) Abstract: Waterproof and breathable sole for shoes, having a structure that comprises: a mid-sole component (10, 110) with a membrane (11, 111) made of a material that is impermeable to water and permeable to water vapor and is connected in spots with a lower protective layer (14, 114) made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated; a tread (15, 115) made of perforated elastomer that is joined perimetrically and hermetically to the component (10, 110); said membrane (11, 111) being associated with said protective layer (14, 114) by way of a thermoreactive adhesive (13, 113).

WO 2004/004505 A1

WATERPROOF AND BREATHABLE SOLE FOR SHOES

Technical Field

The present invention relates to an improved waterproof and breathable sole for shoes.

5 Background Art

Plastic waterproof and breathable soles for shoes are already known.

One of these soles is disclosed in Italian patent no. 1,282,196 by the same Applicant.

In this case, the sole comprises:

- 10 -- a mid-sole with a membrane made of a material that is impermeable to water and permeable to water vapor, associated with a lower protective layer made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated;
- a tread made of perforated elastomer that is joined perimetrically and
- 15 hermetically to the mid-sole.

A waterproof and breathable sole disclosed in WO 98/51177 by the same Applicant is also known; it comprises a preassembled insert in which there is a membrane that is impermeable to water and permeable to water vapor, associated with a lower protective layer made of a material that is

20 resistant to hydrolysis, water-repellent, breathable and/or perforated.

The insert is completed by an element that is overmolded or assembled in place and surrounds the membrane and the protective layer and is joined hermetically to them.

The insert is part of a mid-sole and is joined together with said mid-sole

25 to a tread made of perforated plastic, which is overmolded or assembled in place.

In both cases, the protective layer arranged below the membrane is meant to protect said membrane against piercing due to foreign objects accidentally passing through the holes.

30 The protective layer is normally made of felt and is coupled to the

12
membrane in a breathable manner (by means of spots of thermoplastic adhesive which has for example a polyurethane base), to allow the passage of the vapor from the inside of the shoe toward the outside through the holes provided in the tread.

- 5 Although the soles described above have been commercially available for years now and are unanimously acknowledged to be capable of ensuring a correct exchange of heat and water vapor between the microclimate inside the shoe and the external microclimate, they have been found to have drawbacks, including in particular the tendency for the membrane to tear
10 due to the different traction elasticity modulus with respect to the tread, with which it is monolithically assembled peripherally.

The membrane is in fact normally made of expanded polytetrafluoroethylene, which is a scarcely elastic material, while the tread by its very nature and due to its operating requirements must be very elastic
15 and flexible.

Accordingly, the membrane is unable to absorb the flexural stresses that produce an elastic elongation of the polymer, of which the elastomeric tread is made (PVC, TR, polyurethane, rubber, et cetera), in movements, during use and accordingly tends to tear because its elasticity modulus is exceeded,
20 and loses its waterproofness.

The protective element below the membrane, which is normally made of polyester felt, has been found unable, on its own, to absorb the tensions induced by the deformations of the sole.

In order to reduce the elongation, the structure disclosed in
25 WO 02/32246 A1 has been adopted; this patent describes the use of composite materials with a high ultimate tensile strain and low elongation, but the insertion of said materials is expensive and also causes a general stiffening of the shoe.

Furthermore, the problem of the breakage of the membrane is not solved
30 permanently, because of the reversibility of the phenomenon of

thermoplasticity of the polyurethane adhesive used to laminate the membrane with the felt layer: the melting point of said adhesive (for example 65 °C) is in fact lower than the temperature (for example 180 °C) at which the polymer that constitutes the tread and must form a peripheral seal on the membrane is injected into the mold.

Temperatures higher than the melting point of the polyurethane adhesive can be reached both during the normal production of the shoe and during use of the shoe (for example when walking on hot tarmac during the summer period).

By reaching temperatures higher than the melting point, the thermoplastic adhesive is reactivated and the viscosity is reduced considerably (it is known that viscosity is a function of temperature), allowing complete absorption of said adhesive by the felt.

This means that once the assembly cools, there is no longer enough adhesive to allow adequate coupling of the membrane to the felt layer.

All the stress to which the sole is subjected during use is therefore transmitted to the membrane, which tears due to the problems described above.

This problem is entirely new in soles with respect to other uses for which a membrane that is impermeable to water and permeable to vapor is used.

This performance at high temperatures is in fact not required, for example, for producing laminated fabrics to be used as a lining on an upper, because in such cases temperatures on the order of the temperatures reached in the molding of soles made of polymeric materials are never reached.

In these cases, a maximum temperature of 100 °C can in fact be reached.

Disclosure of the Invention

The aim of the present invention is therefore to provide a waterproof and breathable sole for shoes having an improved structure that is capable of eliminating the drawbacks noted above in known types, which lead to the tearing of the waterproof and water vapor-permeable membrane.

Within this aim, an object of the invention is to not reduce in any case the waterproofness and breathability capabilities of the sole.

Another object is to provide a sole that does not entail particular constructive complications with respect to known soles.

5 Another object is to provide a sole whose costs are competitive with respect to the costs of known types.

This aim and these and other objects that will become better apparent hereinafter are achieved by a waterproof and breathable sole for shoes, having a structure that comprises:

- 10 -- a mid-sole with a membrane made of a material that is impermeable to water and permeable to water vapor and is associated in spots with a lower protective layer made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated;
 - a tread made of perforated elastomer that is joined perimetrically and
 - 15 hermetically to the mid-sole;
- said structure being characterized in that said membrane is associated with said protective layer by means of a thermoreactive adhesive.

Brief description of the drawings

Further characteristics and advantages of the invention will become
20 better apparent from the detailed description of some embodiments thereof, illustrated by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a transverse sectional view of a waterproof and breathable sole for shoes having the structure according to the invention, in a first
25 embodiment thereof;

Figure 2 is a transverse sectional view of a waterproof and breathable sole for shoes having the structure according to the invention, in a second embodiment thereof.

Ways to carrying out the Invention

30 With reference to Figure 1, a waterproof and breathable sole for shoes

has, in a first embodiment, a structure that comprises a mid-sole 10 that is composed of a membrane 11 made of a material that is impermeable to water and permeable to water vapor (normally commercially available and made for example of expanded polytetrafluoroethylene), laminated over a
5 supporting mesh 12 made of synthetic material and associated, by way of spots of adhesive 13, with a lower protective layer 14 made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated, preferably a polyester felt.

The structure further comprises a tread 15 made of elastomer, with
10 through holes 16, which is overmolded or assembled in place on the mid-sole 10 and is perimetrically joined hermetically thereto (see the borders 17 that surround its edges in Figure 1).

According to the invention, the structure is characterized in that said membrane 11 is associated with said protective layer 14 by way of a
15 thermoreactive adhesive.

Thermoreactive adhesives are adhesives that are per se known in another technical field; they are in fact used for example to produce barrier fabrics for surgical uses, which are formed by two or more layers of different materials that are laminated together.

20 Said fabrics in fact require repeated sterilizations in an autoclave at high temperatures in order to allow their reuse, and it is evident that the high temperature reached during the sterilization operation must not cause the separation of the two or more elements that constitute the barrier fabric.

These adhesives, due to the temperature, produce many intermolecular
25 bonds (between molecules), thus forming a three-dimensional structure that is partially rigid and in any case thermally irreversible.

The bonds occur between the NCO and OH groups that are present in the molecular chains that constitute said adhesives.

Thermoreactive adhesives, usable for the purposes of the invention are,
30 for example, thermoplastic polyurethane adhesives which are manufactured

by the company SCHAETTI AG, Switzerland, and marketed under the name PU SCHAETTI FIX 6050.

Practical tests of the use of these thermoreactive adhesives to associate in spots the membrane 11 with the protective layer 14 have shown that their
• 5 molecular bonds do not allow melting and absorption at high temperatures of the adhesive by the felt of the protective layer 14, preventing the separation of the membrane 11 and thus allowing the distribution of the stress over a larger cross-section (membrane 11 + felt of the layer 14).

All this avoids the breakage of the membrane 11 due to its elasticity
10 modulus being exceeded.

With reference now to Figure 2, a waterproof and breathable sole for shoes, in a second embodiment, has a structure that comprises a preassembled insert 110, which corresponds to the mid-sole 10 of the previous embodiment and in which there is a membrane 111 which is made
15 of a material that is impermeable to water and permeable to water vapor (normally commercially available, for example made of expanded polytetrafluoroethylene), which is laminated over a supporting mesh 112 made of synthetic material and associated by spots of adhesive 113 with a lower protective layer 114 made of a material that is resistant to hydrolysis,
20 water-repellent, breathable and/or perforated, preferably a polyester felt.

The insert 110 is completed by a perimetric element 117 that is overmolded or assembled in place and surrounds the membrane 111 (with the mesh 112) and the protective layer 114 and is joined hermetically to them.

25 The insert 110 is joined to a tread 115 made of elastomer, with through holes 116, that is overmolded or assembled in place thereon.

In this case also, the structure is characterized in that said membrane 111 is associated with said protective layer 114 by way of a thermoreactive adhesive 113.

30 The method for obtaining the described improved shoe sole is based on

the steps for assembling the sole parts as disclosed in relation with the preferred embodiments of the invention.

In practice it has been found that the intended aim and objects of the present invention have been achieved.

5 A waterproof and breathable sole for shoes having an improved structure has in fact been devised which eliminates the drawbacks suffered by known types which lead to the tearing of the waterproof and vapor-permeable membrane, without reducing the waterproofness and breathability characteristics of the sole.

10 Moreover, the manufacture of the sole does not entail particular constructive complications with respect to conventional soles.

The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

15 All the details may further be replaced with other technically equivalent elements.

In practice, the dimensions may be any according to requirements.

The disclosures in Italian Patent Application No. PD2002A000187 from which this application claims priority are incorporated herein by reference.

CLAIMS

1. A waterproof and breathable sole for shoes, having a structure that comprises:

— a mid-sole component (10, 110) with a membrane (11, 111) made of a material that is impermeable to water and permeable to water vapor and is connected in spots with a lower protective layer (14, 114) made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated;

— a tread (15, 115) made of perforated elastomer that is joined perimetrioally and hermetically to the component (10, 110);

said structure being characterized in that said membrane (11, 111) is associated with said protective layer (14, 114) by way of a thermoreactive adhesive (13, 113).

2. The sole having the structure according to claim 1, characterized in that said membrane (11) and said protective layer (14) associated therewith are joined hermetically to said tread (15), which is overmolded or assembled in place on said component (10).

3. The sole having the structure according to claim 1, characterized in that said membrane (111) and said protective layer (114) are part of a mid-sole (110) with a preassembled insert that comprises a perimetric element (117) that is overmolded or assembled in place and surrounds said membrane (111) and said protective layer (114) and is joined to them hermetically, said insert (110) being coupled to said tread (115), which is overmolded or assembled in place thereon.

4. The sole according to one or more of the preceding claims, characterized in that said thermoreactive adhesive is a thermoplastic polyurethane adhesive.

5. Use of thermoreactive adhesives to join in spots a membrane (11, 111) made of a material that is impermeable to water and permeable to water vapor and a protective layer (14, 114) made of a material that is

resistant to hydrolysis, water-repellent, breathable and/or perforated, in order to provide waterproof and breathable soles for shoes.

6. The use according to claim 5, characterized in that said thermoreactive adhesive is a thermoplastic polyurethane adhesive.

- 5 7.A method for making a waterproof and breathable sole for shoes that has a structure having a mid-sole component (10, 110) with a membrane (11, 111) made of a material that is impermeable to water and permeable to water vapor and is connected in spots with a lower protective layer (14, 114) made of a material that is resistant to hydrolysis, water-repellent, 10 breathable and/or perforated; a tread (15, 115) made of perforated elastomer that is joined perimetrically and hermetically to the component (10, 110); comprising a step of connecting said membrane (11, 111) to said protective layer (14, 114) by way of a thermoreactive adhesive (13, 113).

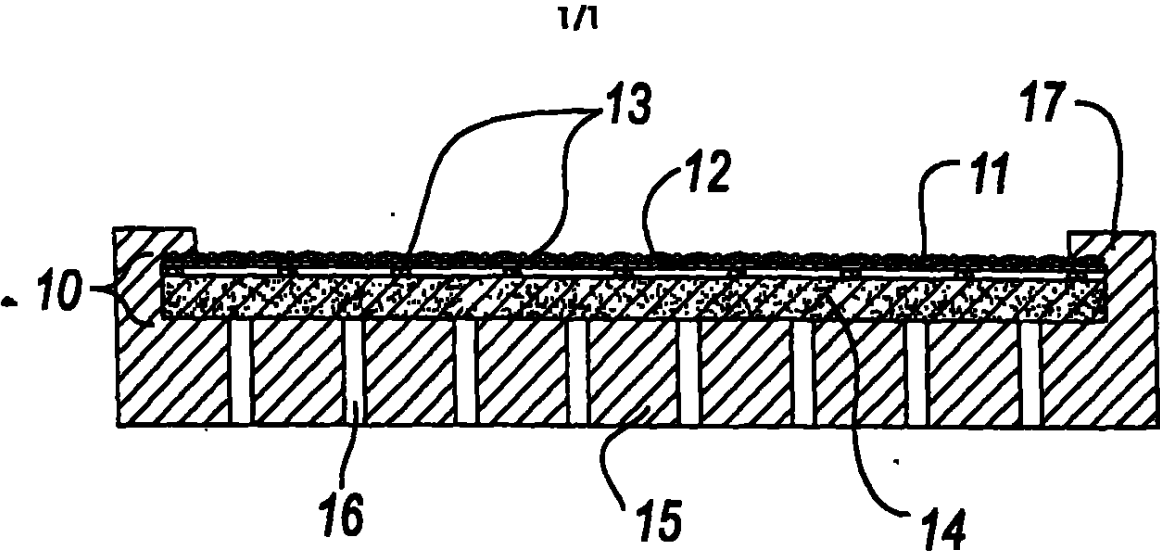


Fig. 1

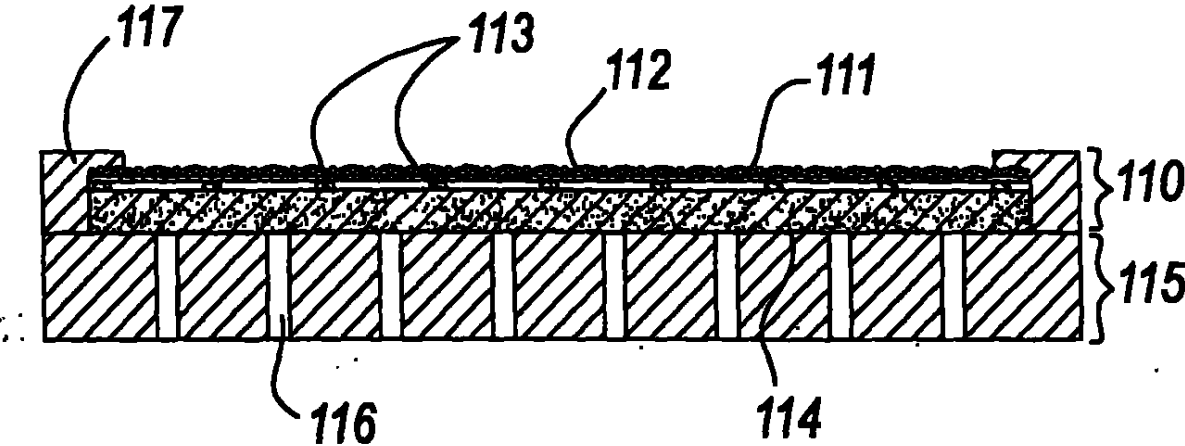


Fig. 2

PCT/EP 03/07273

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A43B7/12

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

B. RELEVANT SEARCHES

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A43B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	DE 100 58 094 C (GORE W L & ASS GMBH) 2 May 2002 (2002-05-02) paragraph '0052!; figure 6	1-7
Y	WO 98 51177 A (POLEGATO MARIO ;NOTTINGTON HOLDING BV (NL)) 19 November 1998 (1998-11-19) cited in the application the whole document	1-7

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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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Date of the actual completion of the international search

10 September 2003

Date of mailing of the international search report

17/09/2003

Name and mailing address of the ISA

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Authorized officer

Cianci, S

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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PCT/EP 03/07273

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PCT/EP 03/07273

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A43B7/12		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 A43B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
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-/-		
☒ Further documents are listed in the continuation of box C. ☒ Patent family members are listed in annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document relating to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "Z" document member of the same patent family		
Date of the actual completion of the international search 10 September 2003		Date of mailing of the international search report 17/09/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patankaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016		Authorized officer Cianci, S

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 82731 A (GORE M L & ASS GMBH ;HAIMERL FRANZ XAVER (DE)) 8 November 2001 (2001-11-08) page 12, line 8 -page 14, line 33	1-7

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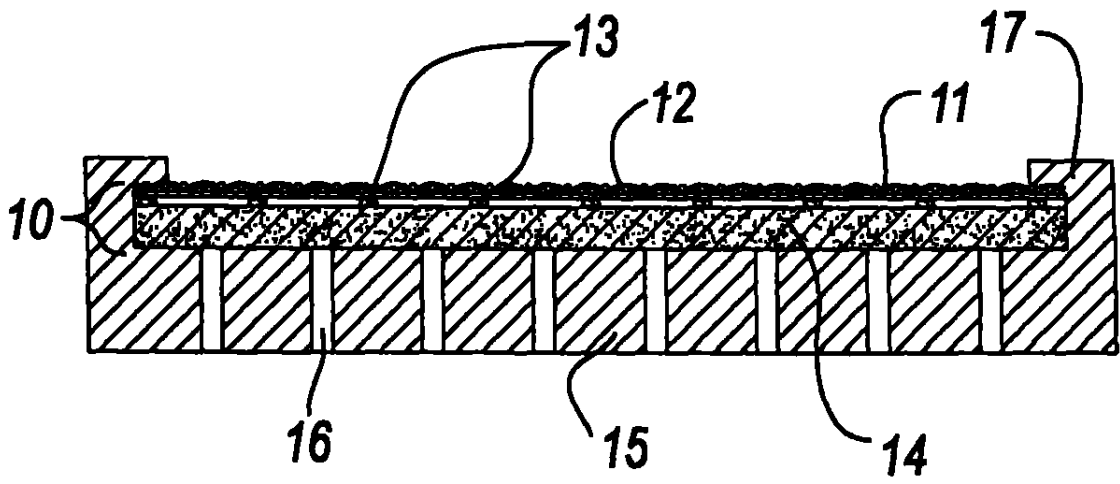


Fig. 1

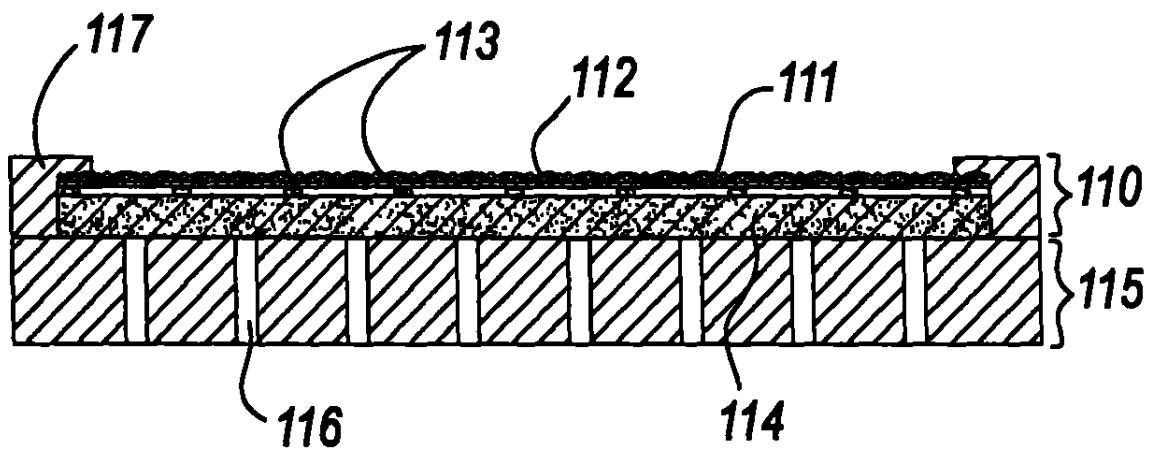


Fig. 2

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IPEA/ _____

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CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only			
Identification of IPEA		Date of receipt of DEMAND	
Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION		Applicant's or agent's file reference 37871/GM/lp	
International application No. PCT/EP03/07273	International filing date (day/month/year) 7 JULY 2003 (07.07.2003)	(Earliest) Priority date (day/month/year) 9 JULY 2002 (09.07.2002)	
Title of invention "WATERPROOF AND BREATHABLE SOLE FOR SHOES"			
Box No. II APPLICANT(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.) GEOX S.p.A. Via Feltrina Centro, 16 31044 MONTEBELLUNA, Località Biadene - (Treviso) IT (for all designated states)		Telephone No. Facsimile No. Teleprinter No. Applicant's registration No. with the Office	
State (that is, country) of nationality: IT		State (that is, country) of residence: IT	
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.) POLEGATO MORETTI Mario (for U.S.A. only) Via Antonini, 7 31035 CROCETTA DEL MONTELLO IT			
State (that is, country) of nationality: IT		State (that is, country) of residence: IT	
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.) FERRARESE Antonio Via Rimembranza, 23 37063 ISOLA DELLA SCALA IT			
State (that is, country) of nationality: IT		State (that is, country) of residence: IT	
☐ Further applicants are indicated on a continuation sheet.			

Sheet No. 2

International application No.
PCT/EP03/07273**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.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.)MODIANO Guido - JOSIF Albert - PISANTY Maurizio -
STAUB Gabriella - MODIANO ALAGEM S. Lara -
ZANOTTI Nemo - MODIANO Micaela
c/o MODIANO & ASSOCIATI - Via Meravigli, 16 -
20123 MILANO - ITALY - ALL PROFESSIONAL
REPRESENTATIVES BEFORE THE E.P.O.

Telephone No.

(003902) 85.90.77.77

Facsimile No.

(003902) 86.38.60

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. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filed

the description

☐ as originally filed☐ as amended under Article 34

the claims

☐ as originally filed☐ as amended under Article 19 (together with any accompanying statement)☐ as amended under Article 34

the drawings

☐ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). (This check-box may be marked only where the time limit under Article 19 has not yet expired.)

* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: ENGLISH☒ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☐ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**

The applicant hereby elects all eligible States (that is, all States which have been designated and which are bound by Chapter II of the PCT)

excluding the following States which the applicant wishes not to elect:

Sheet No. 3.

International application No.
PCT/EP03/07273

Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- | | | |
|--|---|--------|
| 1. translation of international application | : | sheets |
| 2. amendments under Article 34 | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | sheets |
| 5. letter | : | sheets |
| 6. other (specify) | : | sheets |

For International Preliminary Examining Authority use only

received	not received
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

The demand is also accompanied by the item(s) marked below:

- | | |
|--|---|
| 1. ☒ fee calculation sheet | 5. ☐ statement explaining lack of signature |
| 2. ☐ original separate power of attorney | 6. ☐ sequence listings in computer readable form |
| 3. ☐ original general power of attorney | 7. ☐ tables in computer readable form related to sequence listings |
| 4. ☐ copy of general power of attorney; reference number, if any. | 8. ☒ other (specify): Voucher |

Box No. VII 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 demand).

Milano, Italy
February 6, 2004

MODIANO Guldo

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:	
2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):	
3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.	☐ The applicant has been informed accordingly.
4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.	
5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.	

For International Bureau use only

Demand received from IPEA on:

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Modiano, Guido
MODIANO & ASSOCIATI
Via Meravigli, 16
I-20123 Milano
ITALIE

**NOTIFICATION OF RECEIPT
OF DEMAND BY COMPETENT INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY**

(PCT Rules 59.3(e) and 61.1(b), first sentence
and Administrative Instructions, Section 601(a))

Date of mailing
(day/month/year)

13-02-2004

Applicant's or agent's file reference

37871/GM/lp

IMPORTANT NOTIFICATION

International application No.

PCT/EP03/07273

International filing date (day/month/year)

07/07/2003

Priority date (day/month/year)

09/07/2002

Applicant

GEOX S.P.A. ET AL.

1. The applicant is hereby notified that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

06/02/2004

2. This date of receipt is:

- ☒ the actual date of receipt of the demand by this Authority (Rule 61.1(b)).
☐ the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).
☐ the date on which this Authority has, in response to the invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

3. ☐ **ATTENTION:** That date of receipt is after the expiration of 19 months from the priority date. Consequently, in respect of some Offices, the demand does not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)) and the acts for entry into the national phase must therefore be performed within 20 months from the priority date (or later in some Offices). However, in respect of some other Offices, the time limit of 30 months (or later) may nevertheless apply. See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

- ☐ (If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

4. Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/

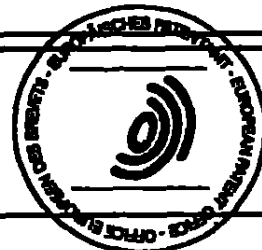


European Patent Office, P.B. 5818 Patentaan 2
NL-2280 HV Rijswijk - Netherlands
Tel.: (+31-70) 340-2040
Fax: (+31-70) 340-3016

Authorized officer

VIEGAS DA CRUZ I

Tel. (+31-70) 340-1923



PATENT COOPERATION TREATY

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From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Modiano, Guido
MODIANO & ASSOCIATI
Via Meravigli, 16
I-20123 Milano
ITALIE

WRITTEN OPINION

(PCT Rule 66)

Applicant's or agent's file reference 37871/GH/lp		Date of mailing (day/month/year) 25/02/2004
International application No. PCT/EP03/07273		REPLY DUE within 2 / 00 months/days from the above date of mailing
International filing date (day/month/year) 07/07/2003	Priority date (day/month/year) 09/07/2002	
International Patent Classification (IPC) or both national classification and IPC A43B7/12		
Applicant GEOX S.P.A. ET AL.		

- This written opinion is the first drawn up by this International Preliminary Examining Authority.
- This opinion contains indications relating to the following items:
 - ☒ Basis of the opinion.
 - ☐ Priority
 - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Lack of unity of invention
 - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Certain documents cited
 - ☐ Certain defects in the international application
 - ☐ Certain observations on the international application
- 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 66.4bis. For an informal communication with the examiner, see Rule 66.4.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
- The final date by which the international preliminary examination report must be established according to Rule 69.2 is: **09/11/2004**

Name and mailing address of the IPEA/  European Patent Office, P.B. 5818 Patentaan 2 NL-2200 HV Rijswijk - Netherlands Tel: (+31-70) 340-2049 Fax: (+31-70) 340-3016	Authorized officer Examiner Formalities officer (incl. extension of time limits) Tel. (+49-89) 2399 2828
---	--



I. Basis of the opinion

1. The basis of this written opinion is the application as originally filed.

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

1. In light of the documents cited in the International search report, it is considered that the invention as defined in at least some of the claims does not appear to meet the criteria mentioned in Article 33(1) PCT, i.e. does not appear to be novel and/or to involve an inventive step (see International search report, in particular the documents cited X and/or Y and corresponding claims references).
2. If amendments are filed, the applicant should comply with the requirements of Rule 66.8 PCT and indicate the basis of the amendments in the documents of the application as originally filed (Article 34 (2) (b) PCT) otherwise these amendments may not be taken into consideration for the establishment of the International preliminary examination report. The attention of the applicant is drawn to the fact that if the application contains an unnecessary plurality of independent claims, no examination of any of the claims will be carried out.

NB: Should the applicant decide to request detailed substantive examination, then an International preliminary examination report will normally be established directly. Exceptionally the examiner may draw up a second written opinion, should this be explicitly requested.

From the RECEIVING OFFICE

PCT

To:

Modiano, Guido
MODIANO & ASSOCIATI
Via Meravigli, 16
I-20123 Milano
ITALIE

**NOTIFICATION OF THE INTERNATIONAL
APPLICATION NUMBER AND OF THE
INTERNATIONAL FILING DATE**

(PCT Rule 20.5(c))

Date of mailing
(day/month/year)

11 AUG 2003

Applicant's or agent's file reference

37871/GM/lp

IMPORTANT NOTIFICATION

International application No.

PCT/EP 03/07273

International filing date (day/month/year)

07/07/2003

Priority date (day/month/year)

09/07/2002

Applicant

GEOK S.P.A.

Title of the invention

1. The applicant is hereby notified that the international application has been accorded the international application number and the international filing date indicated above.
2. The applicant is further notified that the record copy of the international application was transmitted to the International Bureau on the above date of mailing.

3. ☐ Other: _____

* The International Bureau monitors the transmittal of the record copy by the receiving Office and will notify the applicant (with Form PCT/IB/301) of its receipt. Should the record copy not have been received by the expiration of 14 months from the priority date, the International Bureau will notify the applicant (Rule 22.1(c)).

Name and mailing address of the Receiving Office



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040
Fax: (+31-70) 340-3016

Authorized officer

M. Claudapierre
Tel.: (070) 2 40 2657

PCT

REQUEST

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

For receiving Office use only

PCT/EP 0 3 / 0 7 2 7 3	
International Application No.	
0 7 JUL 2003	(0 7. 0 7. 2003)
International Filing Date	
EUROPEAN PATENT OFFICE PCT INTERNATIONAL APPLICATION	
Name of receiving Office and "PCT International Application"	
Applicant's or agent's file reference (if desired) (12 characters maximum) 37871/GM/lp	

Box No. I TITLE OF INVENTION WATERPROOF AND BREATHABLE SOLE FOR SHOES	
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.)	
GEOX S.p.A. Via Feltrina Centro, 16 31044 MONTEBELLUNA, Località Bladene - (Treviso) IT	Telephone No. Facsimile No. Teleprinter No. Applicant's registration No. with the Office
State (that is, country) of nationality: IT	State (that is, country) of residence: IT
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.)	
POLEGATO MORETTI Mario Via Antonini, 7 31035 CROCETTA DEL MONTELLO IT	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: IT	State (that is, country) of residence: IT
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.)	
MODIANO Guido MODIANO & ASSOCIATI Via Meravigli, 16 20123 MILANO IT	Telephone No. (003902) 85.90.77.77 Facsimile No. (003902) 86.38.60 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.	

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) <i>If none of the following sub-boxes is used, this sheet should not be included in the request.</i>	
Name and address: <i>(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.)</i> FERRARESE Antonio Via Rimembranza, 23 37063 ISOLA DELLA SCALA IT	This person is: ☐ applicant only ☒ applicant and inventor ☐ inventor only <i>(If this check-box is marked, do not fill in below.)</i> Applicant's registration No. with the Office
State (that is, country) of nationality: IT	State (that is, country) of residence: IT
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	
Name and address: <i>(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.)</i> 	This person is: ☐ applicant only ☐ applicant and inventor ☐ inventor only <i>(If this check-box is marked, do not fill in below.)</i> Applicant's registration No. with the Office
State (that is, country) of nationality:	State (that is, country) of residence:
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	
Name and address: <i>(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.)</i> 	This person is: ☐ applicant only ☐ applicant and inventor ☐ inventor only <i>(If this check-box is marked, do not fill in below.)</i> Applicant's registration No. with the Office
State (that is, country) of nationality:	State (that is, country) of residence:
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	
Name and address: <i>(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.)</i> 	This person is: ☐ applicant only ☐ applicant and inventor ☐ inventor only <i>(If this check-box is marked, do not fill in below.)</i> Applicant's registration No. with the Office
State (that is, country) of nationality:	State (that is, country) of residence:
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 another continuation sheet.	

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

Form PCT/RO/101 (second sheet) (July 2002)

See Notes to the request form

See Notes to the request form

Box No. IX CHECK LIST; LANGUAGE OF FILING		
This international application contains: (a) the following number of sheets in paper form: request (including declaration sheets) : 5 description (excluding sequence listing part) : 7 claims : 2 abstract : 1 drawings : 1 Sub-total number of sheets : 16 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) : 16 Total number of sheets : 16 (b) sequence listing part of description filed in computer readable form (i) ☐ only (under Section 801(a)(i)) (ii) ☐ in addition to being filed in paper form (under Section 801(a)(ii)) 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):		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): 1. ☒ fee calculation sheet : 1 2. ☒ original separate power of attorney : 2 3. ☐ original general power of attorney : 4. ☐ copy of general power of attorney; reference number, if any: : 5. ☐ statement explaining lack of signature : 6. ☐ priority document(s) identified in Box No. VI as item(s): : 7. ☐ translation of international application into (language): : 8. ☐ separate indications concerning deposited microorganism or other biological material : 9. ☐ sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other)) (i) ☐ copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) : (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 : (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): Voucher (EUR 1.969,00) : 1
Figure of the drawings which should accompany the abstract: 1		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). Milano, Italy July 2, 2003  MODIANO Guido		

For receiving Office use only		For International Bureau use only	
1. Date of actual receipt of the purported international application: 07.07.03 (07 JUL 2003)	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		
Date of receipt of the record copy by the International Bureau:			

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PATENT COOPERATION TREATY

PCT

**NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT**
(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

MODIANO, Guido
Modiano & Associati
Via Meravigli, 16
IT-20123 Milano
Italy

Date of mailing (day/month/year) 29 August 2003 (29.08.03)	
Applicant's or agent's file reference 37871/GM/lp	IMPORTANT NOTIFICATION
International application No. PCT/EP03/07273	International filing date (day/month/year) 07 July 2003 (07.07.03)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 09 July 2002 (09.07.02)
Applicant GEOX S.P.A. et al	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This update and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
09 July 2002 (09.07.02)	PD2002A000187	IT	22 Augu 2003 (22.08.03)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 338-7080	Authorized officer S. Mafla Telephone No. (41-22) 338 9878
---	--

From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

MODIANO, Guido
Modiano & Associati
Via Meravigli, 16
IT-20123 Milano
ITALIE

Date of mailing (day/month/year) 15 January 2004 (15.01.2004)		
Applicant's or agent's file reference 37871/GM/p		IMPORTANT NOTICE
International application No. PCT/EP2003/007273	International filing date (day/month/year) 07 July 2003 (07.07.2003)	Priority date (day/month/year) 09 July 2002 (09.07.2002)
Applicant GEOX S.P.A. et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, AZ, BY, CH, CN, CO, DE, DZ, EP, HU, JP, KG, KP, KR, MD, MK, MZ, RU, TM, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, BA, BB, BG, BR, BZ, CA, CR, CU, CZ, DK, DM, EA, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 15 January 2004 (15.01.2004) under No. WO 2004/004505

4. TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a demand for international preliminary examination, see the *PCT Applicant's Guide*, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Gijsbertus Beijer - Carlos Roy
Facsimile No.(41-22) 740.14.35	Telephone No.(41-22) 338.91.11

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INTERNATIONAL TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

To:

MODIANO & ASSOCIATI
Attn. Modiano, Guido
Via Meravigli, 16
I-20123 Milano
ITALY

Date of mailing
(day/month/year)

17/09/2003

Applicant's or agent's file reference

37871/GM/lp

FOR FURTHER ACTION

See paragraphs 1 and 4 below

International application No.

PCT/EP 03/ 07273

International filing date
(day/month/year)

07/07/2003

Applicant

GEOX S.P.A.

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 18:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Further action(s): The applicant is reminded of the following:

Shortly after 18 months from the priority date, the International application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the International application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 18 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 18 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 spo nl,
Fax (+31-70) 340-3016

Authorized officer

Louis Kainde

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 37871/GM/1p	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/EP 03/ 07273	international filing date (day/month/year) 07/07/2003	(Earliest) Priority Date (day/month/year) 09/07/2002
Applicant GEOX S.P.A.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search 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

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

X _____

☐ None of the figures.

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PATENT COOPERATION TREATY

PCT

INFORMATION CONCERNING ELECTED OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

MODIANO, Guido
Modiano & Associati
Via Meravigli, 16
IT-20123 Milano
Italy

Date of mailing (day/month/year)
27 February 2004 (27.02.2004)

Applicant's or agent's file reference
37871/GM/Ip

IMPORTANT INFORMATION

International application No.
PCT/EP2003/007273

International filing date (day/month/year)
07 July 2003 (07.07.2003)

Priority date (day/month/year)
09 July 2002 (09.07.2002)

Applicant
GEOX S.P.A. et al

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

EP : AT,BE,BG,CH,CY,CZ,DE,DK,EE,ES,FI,FR,GB,GR,HU,IE,IT,LU,MC,NL,PT,RO,SE,
SI,SK,TR
National : BG,CA,CN,DE,GB,IL,JP,KP,KR,MN,NO,PL,RO,RU,SK,US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

AP : GH,GM,KE,LS,MW,MZ,SD,SL,SZ,TZ,UG,ZM,ZW
EA : AM,AZ,BY,KG,KZ,MD,RU,TJ,TM
OA : BF,BJ,CF,CG,CI,CM,GA,GN,GQ,GW,ML,MR,NE,SN,TD,TG
National : AE,AG,AL,AM,AT,AU,AZ,BA,BB,BR,BY,BZ,CH,CO,CR,CU,CZ,DK,DM,DZ,EC,
EE,ES,FI,GD,GE,GH,GM,HR,HU,ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,
MG,MK,MW,MX,MZ,NI,NZ,OM,PG,PH,PT,SC,SD,SE,SG,SL,SY,TJ,TM,TN,TR,TT,TZ,UA,
UG,UZ,VC,VN,YU,ZA,ZM,ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 38(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 38(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer:

Véronique Bellour

Facsimile No. (41-22) 338-7080

Telephone No. (41-22) 338 8802

PATENT COOPERATION TREATY

PCT

COMMUNICATION IN CASES FOR WHICH
NO OTHER FORM IS APPLICABLE

From the INTERNATIONAL BUREAU

To:

MODIANO, Guido
Modiano & Associati
Via Meravigli, 16
I-20123 Milano
ITALIE,

Date of mailing (day/month/year)
03 December 2004 (03.12.2004)

Applicant's or agent's file reference
37871/GM/lp

International application No.
PCT/EP2003/007273

REPLY DUE
see paragraph 1 below

International filing date (day/month/year)
07 July 2003 (07.07.2003)

Applicant
OBOX S.P.A.

1. ☐ REPLY DUE within _____ months/days from the above date of mailing
- ☐ NO REPLY DUE, however, see below
- ☒ IMPORTANT COMMUNICATION
- ☐ INFORMATION ONLY

2. COMMUNICATION:

The International Bureau acknowledges receipt of your letter and your Fax dated 23 November 2004 (23.11.04) regarding the incomplete address of GEOX S.P.A.

Please note that a republication is scheduled for 13 January 2004 (13.01.05).

We apologize for the inconvenience this may have caused.

A copy of this communication is being sent to the Receiving Office.

Best regards.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 338.70.80

Authorized officer
Chantal AUMAITRE

Telephone No. (41-22) 338.86.69

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IMPORTANT NOTE:

A CORRECTED FRONT PAGE OF PUBLICATION WO 2004/004505 A1 HAS BEEN REQUESTED TO WIPO IN ORDER TO QUOTE THE FULL ADDRESS OF APPLICANT AS PER EVIDENCES ENCLOSED.

AS SOON AS SUCH CORRECTED VERSION WILL BE ISSUED, WE SHALL FAX A COPY THEREOF TO YOU.

DR. MODIANO & ASSOCIATI SPA

CONSULENTI PROPRIETÀ INDUSTRIALE - CONSULENTI BREVETTI* - CONSULENTI MARCHI*
EUROPEAN PATENT ATTORNEYS* - EUROPEAN TRADEMARK ATTORNEYS* - US PATENT ATTORNEYS**

BREVETTI E REPARTO LEGALE

PATENT DEPT. & LEGAL DEPT.

TEL +39-02-85.90.77.77 - FAX +39-02-863.860

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TEL +39-02-85.90.77.66 - FAX +39-02-720.210.62

WEBSITE: WWW.MODIANO.COM

MILANO MAIN ADDRESS

VIA MERAVIGLI 16 - 20123 MILANO - ITALY

SWISS ADDRESS (URGENT MATTERS)

P.O.Box 1846 - CH-6830 CHIASSO - SWITZERLAND

November 23, 2004

International Bureau of W.L.P.O.

PCT Receiving Office Section

34 Chemin des Colombettes

CH-1211 GENEVE 20

SVIZZERA

ANTICIPATED BY TELEFAX

Our Ref.: 37871/SM/lp

Re: PCT/EP03/007273 filed July 7, 2003

Applicant: GEOX S.p.A.

Dear Sirs,

Reverting to the above PCT, this is to draw your attention to the fact that Publication WO 2004/004505 A1 has been issued January 15, 2004 with the following Applicant's address:

Via Feltrina Centro, 16
I-31044 Montebelluna (IT)

while full Applicant's address is:

Via Feltrina Centro, 16
31044 Montebelluna, Località Biadene - (Treviso)
IT

In view of the above, this is to ask issuance of a corrected front page of publication WO 2004/004505 A1 quoting the complete Applicant's address.

In support of our request, we herewith enclose a copy of:

- Page one of PCT Request as filed on July 7, 2003;
- Copy of Authorization signed by Applicant, filed on July 7, 2003;
- Front page of publication WO 2004/004505 A1 quoting the INCOMPLETE address.

In view of the impending time limit for the national entries, an urgent handling of the above matter would oblige.

REPARTO BREVETTI
Dr. Ing. G. Modiano
Dr. Ing. A. Modiano
Dr. Ing. M. Flaminio
Dr. Ing. G. Storti
G.L. Modiano
G.L. Modiano
Dr. Ing. A. Modiano
Dr. Ing. V. Chini
Dr. Ing. L. Modiano
Dr. Ing. M. Modiano
Dr. Ing. A. Modiano
M.M. Modiano, M.Sc. (Ing.)
Dr. Ing. A. Modiano
Dr. Ing. R. Modiano
Dr. Ing. L. Modiano
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Dr. Ing. A. Modiano
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Dr. Ing. E. Modiano
Dr. Ing. N. Modiano
C. Modiano
Dr. Ing. M. Modiano
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Dr. Ing. D. Modiano
Dr. Ing. S. Modiano
Dr. Ing. B. Modiano
Dr. Ing. T. Modiano

TRADEMARK DEPARTMENT
REPARTO MARCHI
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Dr. S. Modiano
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Dr. R. Modiano
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Dr. S. Modiano
Dr. S. Modiano
Dr. P. Modiano
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LEGAL COUNSELL
CONSULENTI LEGALI
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BOLOGNA

Via del Mille 5
Tel 051-24.58.04

PERUGIA

Via Argentario 54
Tel 030-22.38.00

MANTOVA

Via Mantova 77
Tel 0376-32.35.35

PADOVA

P.le Stefani 5
Tel 049-68.13.66

TREVISO

Via Sordani 3
Tel 0422-41.05.00

VERONA

Cao P.ta N. 109
Tel 045-82.17.27

Thanking you beforehand for the kind attention to this matter, we remain,

Sincerely yours

Guido MODIANO
European Representative



Encls.: a.a.

COPY

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number
WO 2004/004505 A1

- (51) International Patent Classification: A43B 7/12
- (74) Agent: MODIANO, Guido; Modiano & Associati, Via Mjavigli, 16, IT-20123 Milano (IT).
- (21) International Application Number: PCT/EP2003/007373
- (52) International Filing Date: 7 July 2003 (07.07.2003)
- (53) Filing Language: English
- (54) Publication Language: English
- (30) Priority Data: PD2002A000187 9 July 2002 (09.07.2002) IT
- (55) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GR, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (56) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (for all designated States except US): GEOX S.P.A. [IT/IT]; Via Paltrina Centro 16, I-31044 Montebelluna (IT).
- (72) Inventors; and
- (73) Inventors/Applicants (for US only): POLEGATO MORETTI, Mario [IT/IT]; Via Antonini, 7, I-31035 Crocetta del Montello (IT). FERRARESE, Antonio [IT/IT]; Via Rimembranza, 23, IT-37063 ISOLA DELLA SCALA (IT).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: WATERPROOF AND BREATHABLE SOLE FOR SHOES

(57) Abstract: Waterproof and breathable sole for shoes, having a structure that comprises: a mid-sole component (10, 110) with a membrane (11, 111) made of a material that is impermeable to water and permeable to water vapor and is connected in spots with a lower protective layer (14, 114) made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated; a tread (15, 115) made of perforated elastomer that is joined perimetricaly and hermetically to the component (10, 110); said membrane (11, 111) being associated with said protective layer (14, 114) by way of a thermoreactive adhesive (13, 113).

WO 2004/004505 A1

PCT

REQUEST

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

For receiving Office use only

PCT/EP 0 3 / 0 7 2 7 3	
International Application No.	
0 7 JUL 2003	(0 7 . 0 7 . 2003)
International Filing Date	
EUROPEAN PATENT OFFICE PCT INTERNATIONAL APPLICATION	
Name of receiving Office and "PCT International Application"	
Applicant's or agent's file reference (if desired) (2 characters maximum) 37871/GM/lp	

Box No. I TITLE OF INVENTION WATERPROOF AND BREATHABLE SOLE FOR SHOES	
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 (no State of residence is indicated below.)	
GEOX S.p.A. Via Feltrina Centro, 18 31044 MONTEBELLUNA, Località Bladene - (Treviso) IT	Telephone No. Facsimile No. Teleprinter No. Applicant's registration No. with the Office
State (that is, country) of nationality: IT	State (that is, country) of residence: IT
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 (no State of residence is indicated below.)	
POLEGATO MORETTI Mario Via Antonini, 7 31035 CROCETTA DEL MONTELLO IT	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: IT	State (that is, country) of residence: IT
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.)	
MODIANO Guido MODIANO & ASSOCIATI Via Meravigli, 16 20123 MILANO IT	Telephone No. (003902) 85.90.77.77 Facsimile No. (003902) 86.38.80 Teleprinter No. Agent's registration No. with the Office
☐ Address for correspondence: Mark this check-box where no agent or common representative has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.	



Vollmacht¹
Authorisation¹
Pouvoir¹

Bitte vor dem Ausfüllen des Formblattes Rückseite beachten. /
Please read the notes overleaf before completing the form. /
Veuillez lire les remarques au verso avant de remplir le formulaire.

COPY

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Zeichen des Vertreters (der Vertreter) / Representative's reference /
Référence du (des) mandataire(s)
(max. 16 Positionen / max. 16 espaces / 16 caractères au maximum)

37871/GM/lp

Nr. der Anmeldung (des Patents) / Application/Patent No. /
N° de la demande (du brevet)

Ich (Wir) / I (We) / Je (Nous)²

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"WATERPROOF AND BREATHABLE SOLE FOR SHOES"

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Ort/Place/Lieu: **Montebelluna, Italy**

Datum/Data: **June 30, 2003**

Unterschrift(en) / Signature(s):

GEOX S.p.A. (POLEGATO MORETTI Mario - President)

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **WATERPROOF AND BREATHABLE SOLE FOR SHOES**

(57) Abstract: **Waterproof and breathable sole for shoes, having a structure that comprises: a mid-sole component (10, 110) with a membrane (11, 111) made of a material that is impermeable to water and permeable to water vapor and is connected in spots with a lower protective layer (14, 114) made of a material that is resistant to hydrolysis, water-repellent, breathable and/or perforated; a tread (15, 115) made of perforated elastomer that is joined perimetricaly and hermetically to the component (10, 110); said membrane (11, 111) being associated with said protective layer (14, 114) by way of a thermoreactive adhesive (13, 113).**

WO 2004/004505 A1

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

(Rationalized Report according to the Notice of the President of the EPO published in the OJ11/2001)

Applicant's or agent's file reference 37671/GH/lp	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP03/07273	International filing date (day/month/year) 07/07/2003	Priority date (day/month/year) 09/07/2002
International Patent Classification (IPC) or national classification and IPC A43B7/12		
Applicant GEOX S.P.A. ET AL.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 2 sheets, including this cover sheet.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
These annexes consists of a total of _____ sheets.
- This report contains indications relating to the following items:
 I ☒ Basis of the report
 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 Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 VI ☐ Certain documents cited
 VII ☐ Certain defects in the international application
 VIII ☐ Certain observations on the international application

Date of submission of the demand 06/02/2004	Date of completion of this report 12/05/2004
Name and mailing address of the IPEA/  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Netherlands Tel.: (+31-70) 340-2040 Fax: (+31-70) 340-3016	Authorized officer DEUTSCH J P Tel. (+49-89) 2399 2828 

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PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Modiano, Guido
MODIANO & ASSOCIATI
Via Meravigli, 16
I-20123 Milano
ITALIE

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Data of mailing (day/month/year) 17/05/2004	
Applicant's or agent's file reference 37871/GN/1p	IMPORTANT NOTIFICATION
International application No. PCT/EP03/07273	International filing date (day/month/year) 07/07/2003
Priority date (day/month/year) 09/07/2002	
Applicant GEOX S.P.A. ET AL.	

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purpose of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exceptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Netherlands Tel.: (+31-70) 340-2040 Fax: (+31-70) 340-3016	Authorized officer VIEGAS DA CRUZ I Tel. (+49-89) 2399 2828
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PATENT COOPERATION TREATY

PCT

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

(Rationalised Report according to the Notice of the President of the EPO published in the OJ11/2001)

Applicant's or agent's file reference 37871/GN/1p	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IEPA/416)	
International application No. PCT/EP03/07273	International filing date (day/month/year) 07/07/2003	Priority date (day/month/year) 09/07/2002
International Patent Classification (IPC) or national classification and IPC A43B7/12		
Applicant GEOX S.P.A. ET AL.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 2 sheets, including this cover sheet.
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3. This report contains indications relating to the following items:
 I ☒ Basis of the report
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 V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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Date of submission of the demand 06/02/2004	Date of completion of this report 12/05/2004
Name and mailing address of the IEPA/  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Netherlands Tel.: (+31-70) 340-2040 Fax: (+31-70) 340-3016	Authorized officer DEUTSCH J P Tel. (+49-89) 2399 2828 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**International application No. **PCT/EP03/07273****I. Basis of the report**

The basis of this international preliminary examination is the application as originally filed.

V. Reasoned statement under Rule 68.2(a)(II) with regard to novelty, inventive step or industrial applicability

In light of the documents cited in the international search report, it is considered that the invention as defined in at least some of the claims does not appear to meet the criteria mentioned in Article 33(1) PCT, i.e. does not appear to be novel and/or to involve an inventive step (see international search report, in particular the documents cited X and/or Y and corresponding claim references).

Traducción

TRATADO DE COOPERACIÓN DE PATENTES
PCT
INFORME DE EXAMEN PRELIMINAR INTERNACIONAL
(Artículo 36 y Regla 70 del PCT)

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Referencia del expediente del agente o solicitante 37871/GMLP	PARA ACTUACIONES ADICIONALES	Ver notificación de Transmisión del Reporte de Examen Preliminar (Formato PCT/IPEA416)
Solicitud internacional No. PCT/EP03/07273	Fecha de presentación internacional (día/mes/año) 07/07/2003	Fecha de prioridad (día/mes/año) 09/07/2002
Clasificación Internacional de Patentes (IPC) o clasificación nacional e IPC A43B7/12		
Solicitante GEOX S.P.A. et al.		

1. Este informe de examen preliminar internacional ha sido preparado por esta Administración encargada del Examen Preliminar Internacional y se envía al solicitante en concordancia con el artículo 36.

2. Este INFORME consta de una total de 2 hojas, incluyendo la portada

- ☐ Este informe también se acompaña de ANEXOS, esto es documentos de la descripción, reivindicaciones y/o dibujos que han sido corregidos y que son la base de este informe y/o documentos que contienen rectificaciones realizadas ante esta Administración (Ver Regla 70.16 y Sección 607 de las Instrucciones Administrativas según el PCT)

Estos anexos constan de un total de hojas.

3. Este informe contiene Indicaciones relativas a los siguientes aspectos:

- | | | |
|------|-------------------------------------|--|
| I | ☒ | Fundamentos del Informe |
| II | ☐ | Prioridad |
| III | ☐ | No se establece concepto relativo a la novedad, nivel inventivo y aplicación industrial |
| IV | ☐ | Carencia de unidad de la invención |
| V | ☒ | Declaración razonada según el artículo 35(2), en relación con la novedad, nivel inventivo o aplicación industrial; citaciones y explicaciones que soportan dicha declaración |
| VI | ☐ | Ciertos documentos citados |
| VII | ☐ | Ciertos defectos de la solicitud internacional |
| VIII | ☐ | Ciertas observaciones respecto a la solicitud internacional |

Fecha de presentación de la demanda 06/02/2004	Fecha de terminación de este reporte 12/05/2004
Nombre y dirección de correo de la autoridad encargada del examen preliminar Oficina de patentes Europea D-80298 Munich Tel.: (+49-89) 2369-0, Tx: 523656 epmu d Fax: (+49-89) 2369-4465	Funcionario Autorizado DEUTSCH J P Teléfono No. (+49-89) 2369 2828

Formato PCT/IPEA409 (portada) P20476 (Oct 2002)

I. Base del Informe

La base de este informe de examen preliminar internacional es la solicitud como se presentó originalmente.

V. Declaración motivada según la Regla 66.2(a)(II) en cuanto a la novedad, el nivel inventivo y la aplicación Industrial

A la luz de los documentos citados en el informe de búsqueda internacional, se considera, que la invención, tal y como define en al menos algunas de las reivindicaciones, al parecer no cumple con los criterios establecidos en el artículo 33(1) del PCT, es decir, no parece ser novedosa y/o comprender un nivel inventivo (ver el informe de búsqueda internacional, en particular los documentos citados con X y/o Y, y sus correspondientes números de reivindicaciones).

SUELA IMPERMEABLE Y TRANSPIRANTE PARA CALZADOS

La presente invención tiene por objeto una estructura perfeccionada de suela impermeable y transpirante para calzados.

Son ya conocidas suelas impermeables y transpirantes de material plástico para calzados.

Una de éstas se describe en la patente italiana nº 1.282.196 a nombre del mismo solicitante.

En este caso la suela comprende:

- una Intersuela con una membrana de material impermeable al agua y permeable al vapor acuoso asociada a una capa protectora inferior del material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforada;
- una suela de desgaste de elastómero perforado que está perimetralmente unida de forma sellada a la Intersuela.

Es también conocida la suela impermeable y transpirante descrita en la patente WO 98/51177 a nombre del mismo solicitante y que comprende una inserción preensamblada en la cual está dispuesta una membrana impermeable al agua y permeable al vapor acuoso asociada a una capa protectora inferior de material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforada.

La inserción es completada por un elemento sobremoldeado o sobreensamblado que circunda la membrana y la capa protectora y está unido de forma sellada a las mismas.

La inserción forma parte de una intersuela y está unida con ésta a una suela de desgaste de material plástico perforada sobremoldeada o sobreensamblada.

En ambos casos, la capa protectora dispuesta por debajo de la membrana tiene por objeto proteger la misma de la perforación debida a cuerpos extraños que han pasado accidentalmente a través de los orificios.

La capa protectora es normalmente de fieltro y está acoplada a la membrana de forma transpirante (con punto de adhesivo termoplástico por ejemplo de base poliuretánica) para permitir el paso del vapor del interior del calzado hacia el exterior a

través de los orificios realizados en la suela de desgaste.

5 Estando ya desde hace años en el mercado y siendo unánimemente reconocidas como capaces de asegurar un correcto intercambio térmico y de vapor acuoso entre el microclima interno del calzado y el externo, las suelas descritas anteriormente también han mostrado que adolecen de inconvenientes, entre los cuales, en particular, la tendencia a la laceración de la membrana a causa del diferente módulo elástico a las sollicitaciones de tracción respecto al de la suela de desgaste con la cual la misma está ensamblada solidariamente por su periferia.

10 Normalmente, de hecho la membrana está realizada en politetrafluoroetileno expandido, material muy poco elástico, mientras que la suela de desgaste, por su naturaleza y por la necesidad de uso, debe ser muy elástica y flexible.

15 Sucede por ello que la membrana no es capaz de absorber las sollicitaciones de flexión que producen un alargamiento elástico del polímero del cual está constituida la suela de desgaste de material elastomérico (PVC, TR, poliuretano, goma, etc.) en los movimientos durante el uso y, en consecuencia, tiende a lacerarse al superar su valor del módulo elástico, y a perder la impermeabilidad.

El elemento protector inferior de la membrana, que es normalmente de fieltro de poliéster, por el solo no ha resultado capaz de absorber las tensiones inducidas por las deformaciones de la suela.

20 Para reducir dicho alargamiento se ha adoptado la construcción descrita en la patente WO 02/32248A1 en la cual se describe la utilización de materiales compuestos con alta carga de rotura y bajo alargamiento, pero la inserción de dichos materiales resulta en cambio onerosa además de producir una rigidización general del calzado.

25 Además, el problema de rotura de la membrana no está definitivamente resuelto a causa de la reversibilidad del fenómeno de termoplasticidad del adhesivo poliuretánico utilizado para laminar la membrana en las capas de fieltro: el mismo posee en efecto un punto de fusión inferior (por ejemplo 65°C) respecto a la temperatura (por ejemplo 180°C) a la cual es inyectada en el molde el polímero que constituye la suela de desgaste y que debe realizar el sellado periférico sobre la membrana.

30 Las temperaturas superiores al punto de fusión del adhesivo poliuretánico pueden ser alcanzadas tanto durante el proceso normal de producción del calzado, como durante el uso del calzado (por ejemplo caminando sobre el asfalto caliente durante el período estival).

Alcanzando temperaturas superiores al punto de fusión se reactiva el adhesivo

termoplástico y se rebaja notablemente la viscosidad (es conocido que la viscosidad es función de la temperatura), permitiendo la total absorción de la misma por parte del fieltro.

Esto significa que cuando el conjunto se reenfria, deja de ser adhesivo en la medida suficiente para permitir una adecuada unión de la membrana con la capa de fieltro.

La totalidad del esfuerzo sufrido por la suela durante el uso es por tanto transmitida a la membrana que, debido a los problemas expuestos anteriormente, se lacera.

Dicha problemática es totalmente nueva en las suelas respecto a otros usos para los cuales se emplea una membrana impermeable al agua y permeable al vapor.

Efectivamente, dicha prestación a elevadas temperaturas no se requiere por ejemplo para la producción de tejidos laminados que deben utilizarse como forros del corte de calzados, porque en dichos casos no se alcanzan nunca temperaturas del orden de las que se obtienen en el moldeado de suelas de materiales poliméricos.

En estos casos se puede alcanzar efectivamente como máximo una temperatura de 100°C.

La finalidad principal de la presente invención es, por tanto, poner a punto una suela impermeable y transpirante para calzados con estructura perfeccionada capaz de eliminar los inconvenientes expuestos anteriormente en los tipos conocidos que conducen a la laceración de la membrana impermeable al agua y permeable al vapor acuoso.

En el ámbito de la finalidad expuesta, un objetivo primario es el de no reducir en ningún caso la capacidad impermeable y transpirante de la suela.

Otro objetivo aún es el de poner a punto una suela que no presente particulares complicaciones constructivas respecto a las conocidas.

Otro objetivo aún es poner a punto una suela cuyos costes sean competitivos respecto a los de los tipos conocidos.

Estos y todavía otros objetivos, que se pondrán más claramente de manifiesto a continuación, se alcanzan con una suela impermeable y transpirante para calzados con una estructura que comprende:

- una intersuela con una membrana de material impermeable al agua y permeable al vapor acuoso asociada por puntos a una capa protectora inferior de un material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforado;
- una suela de desgaste de elastómero perforado que está perimetralmente unida de

forma sellada a la intersuela,

estando dicha estructura caracterizada porque dicha membrana está asociada a dicha capa protectora mediante un adhesivo termorreactivo.

5 Otras características y ventajas de la invención resaltarán de la descripción detallada de algunas de sus formas de realización ilustradas únicamente a título indicativo, pero en modo alguno limitativo de su alcance, en los dibujos anexos en los cuales:

10 la fig. 1 ilustra en sección transversal una suela impermeable y transpirante para calzados que presenta una estructura según la invención, en su primera forma de realización;

15 la fig. 2 ilustra en sección transversal una suela impermeable y transpirante para calzados que presenta una estructura según la invención, en su segunda forma de realización.

20 Con referencia a la figura 1 anteriormente citada, una suela impermeable y transpirante para calzados en una primera forma de realización presenta una estructura que comprende una intersuela 10 compuesta por una membrana 11 de material impermeable al agua y permeable al vapor acuoso (normalmente disponible en el mercado, por ejemplo de politetrafluoroetileno expandido), laminada superiormente con una malla 12 de soporte de material sintético y asociada por puntos de adhesivo 13 a una capa protectora inferior 14 de un material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforada, preferentemente un fieltro de poliéster.

25 La estructura comprende también una suela de desgaste 15 de elastómero con orificios pasantes 16 que está sobremoldeada o sobreensamblada a la intersuela 10 y perimetralmente unida de forma sellada a la misma (ver en la figura 1 los bordes 17 que circundan sus bordes).

30 Según la invención, la estructura se caracteriza porque dicha membrana 11 está asociada a dicha capa protectora 14 mediante un adhesivo 13 termorreactivo.

Los adhesivos termorreactivos son adhesivos conocidos en otros sectores técnicos, y de hecho se utilizan para producir por ejemplo tejidos de barrera para usos quirúrgicos formados por dos o más capas de materiales diversos laminados juntos.

Dichos tejidos necesitan en efecto repetidas esterilizaciones en autoclave a

elevadas temperaturas para permitir su reutilización y resulta evidente que la elevada temperatura que se alcanza durante la operación de esterilización no debe representar la separación de los dos o más elementos constituyentes del tejido barrera.

5 Estos adhesivos, por efecto de la temperatura, dan lugar a numerosos enlaces intramoleculares (entre molécula y molécula) creando así una estructura tridimensional, parcialmente rígida y de todos modos térmicamente irreversible.

Los enlaces que se realizan entre los grupos NCO y OH presentes en las cadenas moleculares constituyen los adhesivos mismos.

10 Unos adhesivos termorreactivos adaptos por la presente invención son, por ejemplo, adhesivos de poliuretano termoplásticos, que son producidos por la sociedad SCHAETTI AG - Sulza y comercializados con el nombre PU SCHAETTI FIX 8050.

15 Pruebas prácticas de tracción de estos adhesivos termorreactivos para asociar por puntos la membrana 11 a la capa protectora 14 han puesto en evidencia que sus enlaces moleculares no permiten la fusión y la absorción a elevada temperatura del adhesivo por parte del fieltro de la capa protectora 14, evitando la separación de la membrana 11 y permitiendo así la distribución del esfuerzo sobre una sección mayor (membrana 11 + fieltro de la capa 14).

Todo ello evita la rotura de la membrana 11 por superación de su propio módulo elástico.

20 Con referencia ahora a la figura 2 anteriormente citada, una suela impermeable y transpirante para calzados en una segunda forma de realización presenta una estructura que comprende una inserción 110 preensamblada, correspondiente a la intersuela 10 de la anterior forma de realización, en la cual está dispuesta una membrana 111 de material impermeable al agua y permeable al vapor acuoso (disponible normalmente en el
25 mercado, por ejemplo de politetrafluoroetileno expandido), laminada superiormente con una malla 112 de soporte de material sintético y asociada por puntos de adhesivo 113 a una capa protectora inferior 114 de un material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforado, preferiblemente un fieltro de poliéster.

30 La inserción 110 es completada por un elemento perimetral 117 sobremoldeado o sobreensamblado que circunda la membrana 111 (con mallas 112) y la capa protectora 114 y está unido de forma sellada a las mismas.

La inserción 110 está unida a una suela de desgaste 115 de elastómero con orificios pasantes 116 sobremoldeada o sobreensamblada sobre la misma.

También en este caso la estructura se caracteriza porque dicha membrana 111

esté asociada a dicha capa protectora 114 mediante un adhesivo 113 termorreactivo.

Se ha constatado en la práctica que se han alcanzado la finalidad y los objetivos propuestos en la presente invención.

5 Se ha puesto en efecto a punto una suela impermeable y transpirante para calzados que presenta una estructura perfeccionada que elimina los inconvenientes de los tipos conocidos que conducen a la laceración de la membrana impermeable al agua y permeable al vapor acuoso, sin que se vean reducidas las capacidades impermeables y transpirantes de dicha suela.

10 La realización de la suela no presenta, por tanto, particulares complicaciones constructivas con respecto a las conocidas.

La invención así ideada es susceptible de numerosas modificaciones y variantes, todas las cuales están comprendidas en el alcance del concepto inventivo.

Además todos los detalles pueden ser sustituidos por otros elementos técnicamente equivalentes.

15 En la práctica, las dimensiones pueden ser cualesquiera según las exigencias.

Las revelaciones de la solicitud de patente italiana núm PD2002A000187 de la cual esta solicitud reivindica prioridad están incorporadas en la presente por referencia.

Reivindicaciones

1. Suela impermeable y transpirante para calzados que presenta una estructura que comprende:

5

- una intersuela (10, 110) con una membrana (11, 111) de material impermeable al agua y permeable al vapor acuoso asociada por puntos a una capa protectora (14, 114) inferior de un material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforado; y

10

- una suela de desgaste (15, 115) de elastómero perforado que está perimetralmente unida de forma sellada al componente (10, 110),

15

estando dicha estructura caracterizada porque dicha membrana (11, 111) está asociada a dicha capa protectora (14, 114) mediante un adhesivo (13, 113) termorreactivo.

20

2. Suela que presenta una estructura según la reivindicación 1, caracterizada porque dicha membrana (11) y dicha capa protectora (14) asociada a la misma están unidas de forma sellada a dicha suela de desgaste (15) sobremoldeada o sobreensamblada a dicho componente (10).

25

3. Suela que presenta una estructura según la reivindicación 1, caracterizada porque dicha membrana (111) y dicha capa protectora (114) forman parte de una intersuela (110) con inserción preensamblada que comprende un elemento perimetral (117) sobremoldeado o sobreensamblado que circunda la membrana (111) y la capa protectora (114) y está unida de forma sellada a las mismas, estando dicha inserción (110) unida a dicha suela de desgaste (115) sobremoldeada o sobreensamblada sobre la misma.

30

4. Suela según una o varias de las reivindicaciones anteriores, caracterizada porque dicho adhesivo termorreactivo es un adhesivo de poliuretano termoplástico.

5. Uso de adhesivos termorreactivos para la unión por puntos entre la membrana

(11, 111) de material impermeable al agua y permeable al vapor acuoso y una capa protectora (14, 114) de material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforado, para la realización de suelas impermeables y transpirantes para calzados.

5 6. Uso según la reivindicación anterior, caracterizado porque dicho adhesivo termorreactivo es un adhesivo de poliuretano termoplástico.

10 7. Un método para poner a punto una suela impermeable y transpirante para calzados que presenta una estructura que comprende una intersuela (10, 110) con una membrana (11, 111) de material impermeable al agua y permeable al vapor acuoso asociada por puntos a una capa protectora (14, 114) inferior de un material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforado; una suela de desgaste (15, 115) de elastómero perforado que está perimetralmente unida de forma sellada al componente (10, 110) que comprende una fase para asociar dicha membrana (11, 111) a dicha capa protectora (14, 114) mediante un adhesivo (13, 113) termorreactivo.

15

RESUMEN

Suela Impermeable y transpirante para calzados que presenta una estructura que comprende:

- 5 - una intersuela (10, 110) con una membrana (11, 111) de material impermeable al agua y permeable al vapor acuoso asociada por puntos a una capa protectora (14, 114) inferior de un material resistente a la hidrólisis, hidrorrepelente, transpirante y/o perforado; y**
- 10 - una suela de desgaste (15, 115) de elastómero perforado que está perimetralmente unida de forma sellada al componente (10, 110),**

estando dicha estructura caracterizada porque dicha membrana (11, 111) está asociada a dicha capa protectora (14, 114) mediante un adhesivo (13, 113) termorreactivo.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

NIT : 800176089-2

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RECIBO OFICIAL DE CAJA : 05 - 4,991
FECHA : ENERO 24 DE 2005

SUPERINDUSTRIA Y COMERCIO
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Dependencia: 2005 DIVISION DE NUEVAS CREACIONES

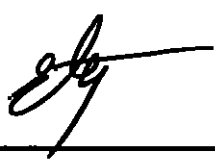
***** CONSIGNACION *****

DEPOSITANTE	TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PGO	Vr. PAGO
CAVELIER ABOGADOS	CONSIGNACION	BANCO POPULAR	050-00110-6	32758706	24/01/2005	33,330,000.00

***** C O N C E P T O *****

CANT.	RENTISTICO	CONCEPTO	TOTAL CONCEPTO
1	30005-01-01 SOLICITUDES	1 TRAMITES DE SOL. DE PATENTE DE IN	443,000.00
		TOTAL :	443,000.00

SON: CUATROCIENTOS CUARENTA Y TRES MIL PESOS

RESPONSABLE : 

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

060 13377-841-001-8

SUPERINDUSTRIA Y COMERCIO
Radicacion : 03011105 00000000 Folios: 68
Fecha (AMD): 2005-02-08 17:20:06
Tramite : 011 PCT-PATENT 379 FASE NUCI 411 PRESENTAR
Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

REQUISITOS NECESARIOS PARA PRESENTACION Y AGILIZACION DEL TRAMITE

	USUARIO	RADICADOR
PATENTE DE INVENCION ☒	()	()
MODELO DE UTILIDAD	()	()
- Indicación de que se solicita la concesión de una patente.	()	()
- Datos de identificación del solicitante o de la persona que se presenta la solicitud.	()	()
- Descripción de la invención.	()	()
- Dibujos de ser estos pertinentes.	()	()
- Comprobante de Pago de las tasas establecidas.	()	()
COMPLETA ☒	INCOMPLETA ()	()

DISEÑO INDUSTRIAL ()		
- Indicación de que se solicita el registro de Diseño Industrial	()	()
- Datos de identificación del solicitante o de la persona que presenta la solicitud.	()	()
- Representación gráfica o fotográfica del Diseño Industrial o muestra del Material que incorpora el diseño.	()	()
- Comprobante de pago de las tasas establecidas	()	()
COMPLETA ()	INCOMPLETA ()	()

ESQUEMA DE TRAZADO ()		
- Indicación de que solicita el registro de un Esquema de trazado.	()	()
- Datos de identificación del solicitante o de la persona que presenta La solicitud.	()	()
- Representación gráfica del esquema de trazado	()	()
- Comprobante de pago de las tasas establecidas.	()	()
COMPLETA ()	INCOMPLETA ()	()

Firma Responsable:



Fecha:

2020
Bogotá DC

Doctor
EMILIO FERRERO
Apoderado
GEOX S.P.A.

REFERENCIA:	Radicación No.	05-11185
	Solicitud Internacional	PCT/EP2003/007273
	Fecha inicio fase nacional	09-02-2005
	Trámite	011
	Evento	379
	Actuación	416
	Oficio No.	220
	Folios	001

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en la Decisión 486 de la Comisión de la Comunidad Andina, el Tratado de Cooperación en Materia de Patentes (PCT), el Reglamento y la Circular Única de la Superintendencia de Industria y Comercio, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial.

Cúmplase
Dado en Bogotá DC

03 MAR. 2005



ALIX CARMENZA CÉSPEDES DE VERGEL
Jefe de la División de Nuevas Creaciones

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