Title (en)

MICROPORATION OF HUMAN SKIN FOR DRUG DELIVERY AND MONITORING APPLICATIONS

Title (de)

MIKROPORATION DER MENSCHLICHEN HAUT ZUR ARZNEIMITTELABGABE UND ÜBERWACHUNGSANWENDUNGEN

Title (fr)

REALISATION DE MICROPORES SUR LA PEAU HUMAINE POUR L'ADMINISTRATION DE MEDICAMENTS ET LES APPLICATIONS DE MONITORAGE

Publication

EP 0858285 A4 20000517 (EN)

Application

EP 96929098 A 19960829

Priority

- US 52054795 A 19950829
- US 804395 P 19951030
- US 9613865 W 19960829

Abstract (en)

[origin: WO9707734A1] A method of enhancing the permeability of the skin (120, 274) to an analytic for diagnostic purposes or to a drug for therapeutic purposes is described utilizing micro-pore and optionally sonic energy and a chemical enhancer. If selected, the sonic energy may be modulated by means of frequency modulation, amplitude modulation, phase modulation, and/or combinations thereof. Micro-pore is accomplished by (a) ablating the stratum corneum (274) by localized rapid heating of water such that water is vaporized, thus eroding cells; (b) puncturing the stratum corneum (274) which a micro-lancet calibrated to form a micro-pore of up to about 1000 mu m in diameter; (c) ablating the stratum corneum (274) by focusing a tightly focused beam of sonic energy onto the stratum corneum (274); (d) hydraulically puncturing the stratum corneum (274) with a high-pressure jet of fluid to form a micro-pore of up to about 1000 mu m in diameter; or (e) puncturing the stratum corneum (274) with short pulses of electricity to form a micro-pore of up to about 1000 mu m in diameter.

IPC 1-7

A61B 5/00; A61M 37/00

IPC 8 full level

A61B 5/00 (2006.01); **A61B 5/145** (2006.01); **A61B 5/1455** (2006.01); **A61B 5/1459** (2006.01); **A61B 5/1473** (2006.01); **A61B 5/1477** (2006.01); **A61B 5/1491** (2006.01); **A61B 5/151** (2006.01); **A61B 5/157** (2006.01); **A61B 10/00** (2006.01); **A61K 41/00** (2006.01); A61B 17/00 (2006.01); A61B 17/32 (2006.01); A61B 18/20 (2006.01); A61M 37/00 (2006.01)

CPC (source: EP)

A61B 5/14514 (2013.01); **A61B 10/0045** (2013.01); **A61K 41/0047** (2013.01); A61B 5/1486 (2013.01); A61B 17/3203 (2013.01); A61B 18/20 (2013.01); A61B 18/203 (2013.01); A61B 2017/00172 (2013.01); A61B 2017/00761 (2013.01); A61B 2017/00765 (2013.01); A61B 2018/00452 (2013.01); A61B 2018/0047 (2013.01); A61M 37/0092 (2013.01); A61M 2037/0007 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9707734 A1 19970306; AU 6863196 A 19970319; AU 707065 B2 19990701; BR 9610012 A 19991221; CA 2199002 A1 19970301; CA 2199002 C 19990223; CN 1174713 C 20041110; CN 1195276 A 19981007; EP 0858285 A1 19980819; EP 0858285 A4 20000517; ES 2536459 T3 20150525; GB 2307414 A 19970528; GB 2307414 B 19980311; GB 9702766 D0 19970402; HK 1009321 A1 19990528; IL 123379 A0 19980924; IL 123379 A 20020421; JP 2006192285 A 20060727; JP 3899427 B2 20070328; JP H11511360 A 19991005; NO 334437 B1 20140303; NO 980878 D0 19980227; NO 980878 L 19980427; PT 1563788 E 20150602; TR 199800347 T1 19980521

DOCDB simple family (application)

US 9613865 W 19960829; AU 6863196 A 19960829; BR 9610012 A 19960829; CA 2199002 A 19960829; CN 96196671 A 19960829; EP 96929098 A 19960829; ES 05011002 T 19960829; GB 9702766 A 19960829; HK 98110113 A 19980824; IL 12337996 A 19960829; JP 2006038655 A 20060215; JP 51055297 A 19960829; NO 980878 A 19980227; PT 05011002 T 19960829; TR 9800347 T 19960829