

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

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 August 2009 (06.08.2009)

(10) International Publication Number
WO 2009/097471 A3

(51) International Patent Classification:

A61K 8/00 (2006.01) *A61K 31/74* (2006.01)
A61K 9/00 (2006.01)

(21) International Application Number:

PCT/US2009/032510

(22) International Filing Date:

30 January 2009 (30.01.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/022,833 30 January 2008 (30.01.2008) US

(71) Applicant (for all designated States except US):

MEDIQUEST THERAPEUTICS, INC. [US/US]; 22322
20th Ave. SE, Suite 100, Bothell, WA 99021 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **DECHOW, Frederick,
J.** [US/US]; 22322 20th Ave. SE, Suite 100, Bothell, WA
98021 (US).

(74) Agents: **AMERNICK, Burton A.** et al.; Connolly Bove
Lodge & Hutz LLP, 1875 Eye Street, NW, Suite 1100,
Washington, DC 20006 (US).

(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ,
EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ,
LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL,
SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK,
MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(88) Date of publication of the international search report:

24 March 2016

(54) Title: IMPROVING THE APPEARANCE OF NAILS

(57) Abstract: A method is provided for improving the appearance of nails of a patient wherein a composition is topically applying to the patient's nail(s) exhibiting symptoms of at least one condition selected from the group consisting of onycholysis, onychoschizia or onychorrhexis and wherein the composition contains at least two biocompatible organic solvents, a polar lipid, a surfactant, water, urea and a thickener wherein the organic solvents include an ester and a dihydric and, or polyhydric alcohol is provided.



WO 2009/097471 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 09/32510

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61K 8/00, 9/00, 31/74 (2009.01)

USPC - 424/47, 78.02

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)

USPC - 424/47, 78.02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 424/449-450 (see search terms below)Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWest (PGPB, USPT, EPAB, JPAB), Google Patents, Google Scholar - onycholysis, ester, isopropyl, alcohol.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,585,963 B1 (Quan et al.) 01 July 2003 (01.07.2003) col 2, ln 45, ln 63; col 3, ln 66-67; col 4, ln 1-3; col 6, ln 45-48; col 7, ln 55-56, ln 62; col 8, ln 66-67; col 9, ln 1; col 10, ln 13-15, ln 25-27, ln 30, ln 59-60; col 11, ln 10-12, ln 23, ln 34; col 12, ln 56-58, ln 63; col 13, ln 3-4	1-14
Y	US 2007/0014743 A1 (Birnbbaum) 18 January 2007 (18.01.2007) para [0040]	1-14

☐ Further documents are listed in the continuation of Box C.

* 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 application or patent 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 referring 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

"&" document member of the same patent family

Date of the actual completion of the international search

12 March 2009 (12.03.2009)

Date of mailing of the international search report

18 MAR 2009

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774