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(54) Title: ULTRASOUND HAIR TREATMENT

(57) Abstract: The present invention relates to methods for the ultrasound enhancement of hair treatments, and to compositions and kits relating to said method. The invention further relates to ultrasonic devices for use in the methods.



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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 07/70104

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(8) - A61Q 5/00, 7/00, 9/00; A45D 7/06 (2008.01)  
 USPC - 132/202, 271  
 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 - 132/202, 271

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 USPC - 132/148, 202, 206, 207, 212, 221, 271 -- text search, 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,USOC,EPAB,JPAB); DialogPRO(Engineering); Google Scholar  
 Search Terms Used: ultrasound, ultrasonic, treat, hair, brush, fibrous, fiber, fibre, energy, keratinous, keratin, SDS, sodium dodecyl sulfate, sodium docecyl sulfate, potassium hydroxide, sodium hydroxide, ethanol, 360, degree (- cont'd on p. 8 --)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,575,173 B2 (QUAN et al.) 10 June 2003 (10.06.2003), entire document especially Figs 1, 2, 3, 3A; col 1, ln 13; col 2, ln 66-67; col 3, ln 1-4, 46-49, 54; col 4, ln 37-67; col 6, ln 12, 36-40; col 7, ln 1-12, 46-53, 61-67; col 8, ln 1-7, 11-33, 56-59, 66-67; col 9, ln 1-21.	1, 3, 5, 20-22 ----- 2, 4, 6-19, 23-40
Y	US 3,281,948 A (GOBLE) 01 November 1966 (01.11.1966), especially Figs 5, 8; col 3, ln 67-73; col 4, ln 49.	2, 4, 6-8, 17-19, 23-38, 40
Y	US 4,936,027 A (TSUJI) 26 June 1990 (26.06.1990), especially Figs 1, 6, 7, 9; col 1, ln 30-32, 45-55; col 4, ln 1-2, 5, 9-13, 19-25, 56-59, 63, 68; col 5, ln 37-48; col 6, ln 52-61.	6-8, 23-39
Y	US 4,390,033 A (KHALIL et al.) 28 June 1983 (28.06.1983), especially col 6, ln 51-58.	9, 12, 13, 16
Y	US 5,782,933 A (WIS-SUREL et al.) 21 July 1998 (21.07.1998), especially col 3, ln 36; 54-59.	10, 11
Y	US 4,487,760 A (YAMAMOTO et al.) 11 December 1984 (11.12.1984), especially col 3, ln 19-20, 59-62.	12-15

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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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"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search 09 January 2008 (09.01.2008)	Date of mailing of the international search report <b>04 MAR 2008</b>
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

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Continuation of B. FIELDS SEARCHED:

Search Terms Used (cont'd): round, rod, cylinder, cylindrical, attachment, lock, conduct, sheath, KOH, weight, NaOH, liquid, aqueous, mol, moles, molar, molecule, acoustic, coupled, coupling, longitud, radial