

Search query (1): [SP]: This invention relates to a hair styling device, and in particular a hair waving device. The device has a chamber for containing the length of hair, and a first forming member and a second forming member within the chamber, a first hair-receiving region between the first forming member and the second forming member. A first driving member can move relative to the first forming member between an inoperative position outside the first hair-receiving region and an operative position within the first hair-receiving region. The first driving member drives a portion of the length of hair into the first hair-receiving region to form a first wave in the length of hair. The device can comprise multiple forming members and multiple driving members to produce multiple waves.

Results: 13

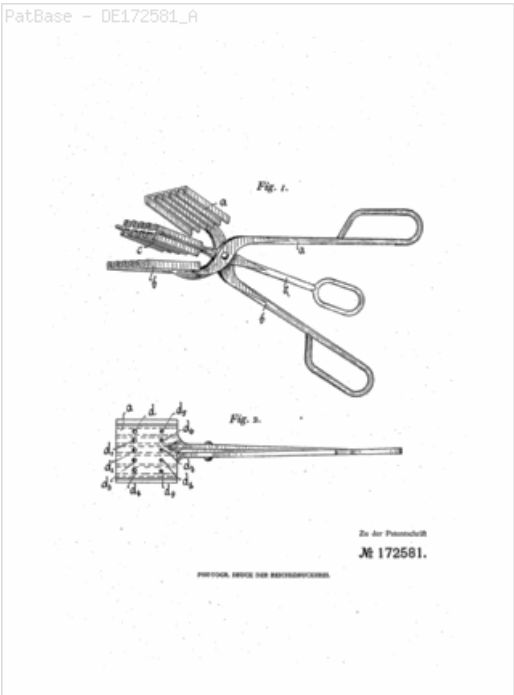
Search history

Search 1: [SP]: This invention relates to a hair styling device, and in particular a hair waving device. The device has a chamber for containing the length of hair, and a first forming member and a second forming member within the chamber, a first hair-receiving region between the first forming member and the second forming member. A first driving member can move relative to the first forming member between an inoperative position outside the first hair-receiving region and an operative position within the first hair-receiving region. The first driving member drives a portion of the length of hair into the first hair-receiving region to form a first wave in the length of hair. The device can comprise multiple forming members and multiple driving members to produce multiple waves. (Results 13)

1) Family number: 25479681 (DE172581 A)

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Classifications:
International (IPC 8-9): A45D1/06 (Advanced/Invention);
A45D1/00 (Core/Invention)
International (IPC 1-7): A45D1/12
CPC: A45D1/06
European: A45D1/06



Family:

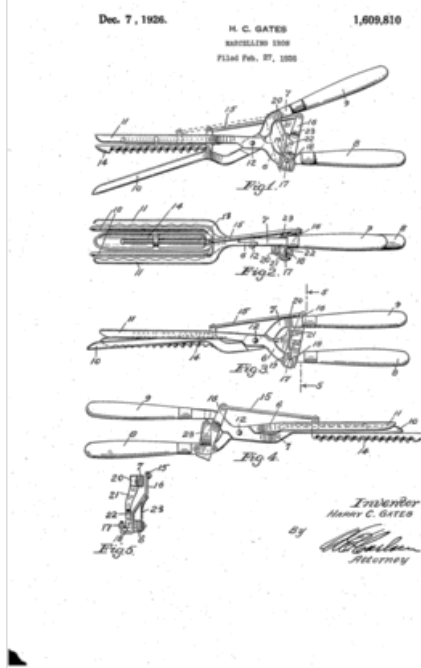
Publication number	Publication date	Application number	Application date
DE172581 A	00000000		00000000

2) Family number: 19933743 (US1609810A)

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Title: MARCELLING IRON

Classifications:
International (IPC 8-9): A45D1/08 (Advanced/Invention);
A45D1/00 (Core/Invention)
International (IPC 1-7): A45D1/12
CPC: A45D1/08
European: A45D1/08
US: 132/225

**Family:**

Publication number	Publication date	Application number	Application date
US1609810 A	19261207	US19260091252	19260227

Priority:

US19260091252 19260227

Probable Assignee:

GATES HARRY C

Assignee(s): (std):

GATES HARRY C

Inventor(s): (std):

GATES HARRY C

3) Family number: 18599599 (GB303043A)

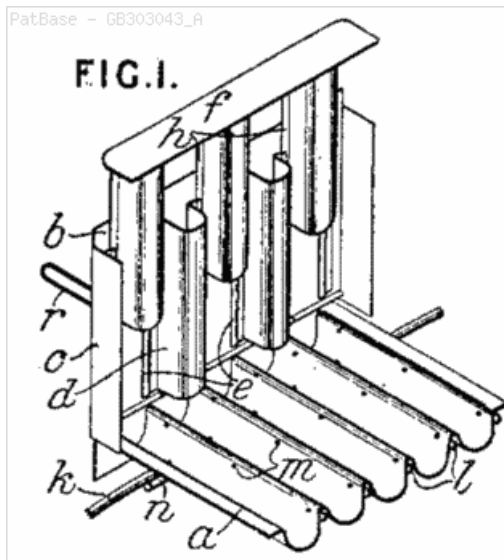
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Title: Improvements in or relating to devices for curling or waving hair**Classifications:****International (IPC 8-9):** A45D1/06 A45D4/10 (Advanced/Invention);

A45D1/00 A45D4/00 (Core/Invention)

International (IPC 1-7): A45D2/36**CPC:** A45D1/06 A45D4/10**European:** A45D1/06 A45D4/10

PatBase - GB303043_A

**Family:**

Publication number	Publication date	Application number	Application date
GB303043 A	19281227	GB19270025409	19270926

Priority:

GB19270025409 19270926

Probable Assignee:

AUBREY HARDY

Assignee(s): (std):

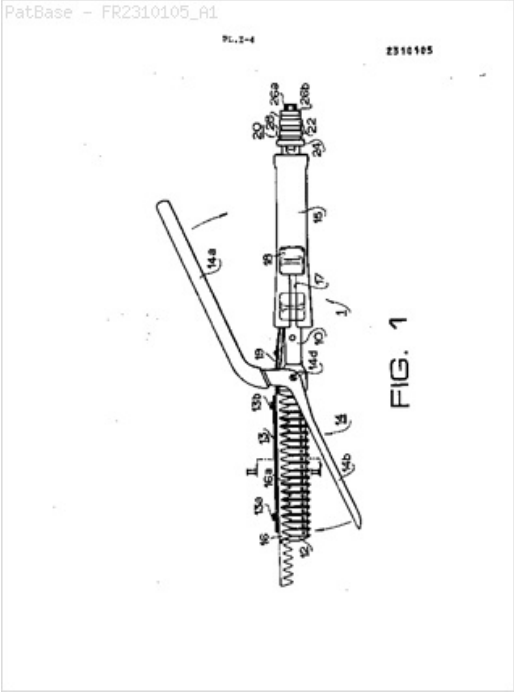
AUBREY HARDY ; ERNEST HOLMAN

Title: FER A FRISER HAIR CONDITIONER AND CURLING TONGS - HAS HEATING ELEMENT IN TUBE AND LEVER FOR CLAMPING HAIR

Abstract: Source: FR2310105A (Claim 1) 1 - Fer a friser pour friser les cheveux, au moyen d'un organe chauffant electriquement, caracterise en ce qu'il comprend A) un tube renfermant une source de chaleur, dont la surface exterieure comporte une premiere partie plate et une seconde partie profilee lui donnant une section transversale de forme sensiblement en demi-cercle; B) un coulisseau qui coulisse sur la surface plate de tube renfermant la source de chaleur et comporte des parois laterales en dents de scie faisant saillie a partir de l'un des bords lateraux; C) un organe de maintien des cheveux monte rotatif sur le tube renfermant la source de chaleur pour maintenir les cheveux entre lui et ce tube lors du frisage des cheveux. The curling tongs (1) have a heating element contained in a tube (12) which is flat at the top. A slide (16) with saw teeth (16a) on its lateral walls slides on the flat surface of the tube. The hair is held against the heated tube by a lever (14) which rotates around a pin (14d) through the tube end. The heated tube may also contain some non-flammable fibres rolled round the heating element which can absorb a hair treatment product. The tube has a series of holes in its exterior surface which allow the product to evaporate to the exterior and penetrate between the hairs.

Classifications:

International (IPC 8-9): A45D1/00 A45D1/04 A45D1/20 A45D4/16 (Advanced/Invention); A45D1/00 A45D4/00 (Core/Invention)
International (IPC 1-7): A45D1/04 A45D1/08 C07C139/14 C07C143/28
CPC: A45D1/04 A45D1/20 A45D4/16 A45D2001/008
European: A45D1/04 A45D1/20 A45D4/16 K45D1/00V



Family:

Publication number	Publication date	Application number	Application date
FR2310105 A1	19761203	FR19750039710	19751224
FR2310105 B1	19780512	FR19750039710	19751224
JP51141181 U1	19761113	JP19750061910U	19750507

Priority:

JP19750061910U 19750507

Probable Assignee: TAKAHASHI NOBUAKI

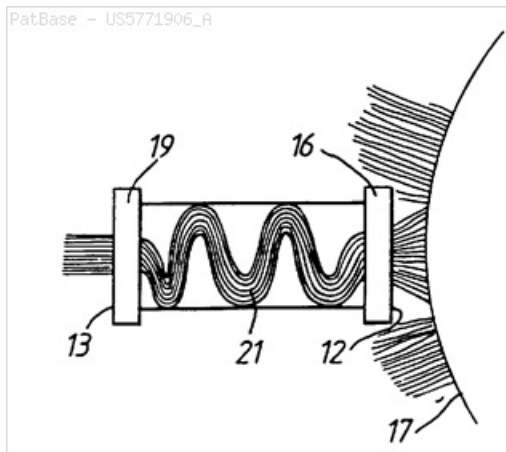
Assignee(s): (std): TAKAHASHI NOBUAKI

Title: Method of waving hair

Abstract: Source: US5771906A PCT No. PCT/GB95/00406 Sec. 371 Date Aug. 27, 1996 Sec. 102(e) Date Aug. 27, 1996 PCT Filed Feb. 27, 1995 PCT Pub. No. WO95/22920 PCT Pub. Date Aug. 31, 1995A device for waving a tress of hair comprises a length of extendible tube formed of elastic material. The tube is provided at each end with gripping means to secure the ends of the tube to the tress of hair. A method of waving a tress of hair comprises the steps of inserting the tress of hair (14) into the elastic tube (11), securing one end of the tube to the tress of hair, extending the tube lengthwise and securing the opposite end thereof to the tress of hair. When the elastic tube is released, the tress of hair contained therein is caused to assume a sinuous waved form. The tress of hair is treated with a chemical substance either prior to insertion in the tube or when in the tube to cause the tress of hair to retain its waved form.

Classifications:

International (IPC 8-9): A45D2/00 A45D2/02 A45D2/08 A45D2/18 A45D2/38 A45D6/00 A45D7/00 A45D7/04 (Advanced/Invention); A45D2/02 A45D6/00 (Advanced/Non-invention); A45D2/00 A45D6/00 A45D7/00 (Core/Invention)
International (IPC 1-7): A45D A45D2/00 A45D2/08 A45D2/38 A45D6/00 A45D7/00 A45D7/04
CPC: A45D2/00 A45D7/00 A45D2002/025
European: A45D2/00 A45D7/00 K45D2/02E
US: 132/207 132/222 132/270

**Family:**

Publication number	Publication date	Application number	Application date
AT188850 E	20000215	AT19950909064T	19950227
AU199517160 A1	19950911	AU19950017160	19950227
AU701444 B2	19990128	AU19950017160	19950227
BG100808 A	19970829	BG19960100808	19960828
BG62153 B1	19990430	BG19960100808	19960828
BRPI9506904 A	19970902	BR1995PI06904	19950227
CA2184296 AA	19960827	CA19952184296	19950227
CZ9602517 A3	19970212	CZ19960002517	19950227
DE69514647 D1	20000224	DE19956014647	19950227
DE69514647 T2	20000831	DE19956014647T	19950227
EP0748173 A1	19961218	EP19950909064	19950227
EP0748173 B1	20000119	EP19950909064	19950227
ES2144605 T3	20000616	ES19950909064T	19950227
GB2287403 A1	19950920	GB19940003790	19940228
GB2287403 B2	19970827	GB19940003790	19940228
GB9403790 A0	19940420	GB19940003790	19940228
HK1011917 A1	20000915	HK19980113247	19981214
HU213781 B	19971028	HU19960002347	19950227
HU74473 A2	19961230	HU19960002347	19950227
HU9602347 A0	19961028	HU19960002347	19950227
JP3927231 B2	20070606	JP19950522216	19950227
JP9509348 T2	19970922	JP19950522216T	19950227
NO963582 A	19960918	NO19960003582	19960827
NO963582 A0	19960827	NO19960003582	19960827
RO114731 B	19990730	RO19960001707	19950227
RO114731 B3	19990730	RO19960001707	19950227
RU2127992 C1	19990327	RU19960120175	19950227
RU96120175 A	19981120	RU19960120175	19960928
US5771906 A	19980630	US19960704498	19960827
WO9522920 A1	19950831	WO1995GB00406	19950227

Priority:

GB19940003790 19940228 WO1995GB00406 19950227

Probable Assignee: DE BENEDICTIS ALFREDO**Assignee(s):** (std): BENEDICTIS ALFREDO DE ; BENEDICTIS DE ; BENEDICTIS DE ALFREDO ; AL FREDO DE BENEDIKTIS ; ALFREDO DE BENEDICTIS ; DE BENEDICTIS ALFREDO MILTON KEYNES**Assignee(s):** DE BENEDICTIS ALFREDO ; AL'FREDO DE BENEDIKTIS ; DE BENEDICTIS ACFREDO**Inventor(s):** (std): AL FREDO DE BENEDIKTIS ; ALFREDO DE BENEDICTIS ; BENEDICTIS ALFREDO DE ; DE BENDICTIS ALFREDO ; DE BENEDICTIS ALFREDO ; DE BENEDICTIS ACFREDO**Inventor(s):** AL'FREDO DE BENEDIKTIS ; BENDICTIS ALFREDO DE**Agent(s):** WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; BORDEN LADNER GERVAIS LLP**Designated states:** AT AU BE BG BR CA CH CZ DE DK ES FR GB GR HU IE IT JP LI LU MC NL NO PL PT RO RU SE US**6) Family number: 42814866 (US6148829A)**

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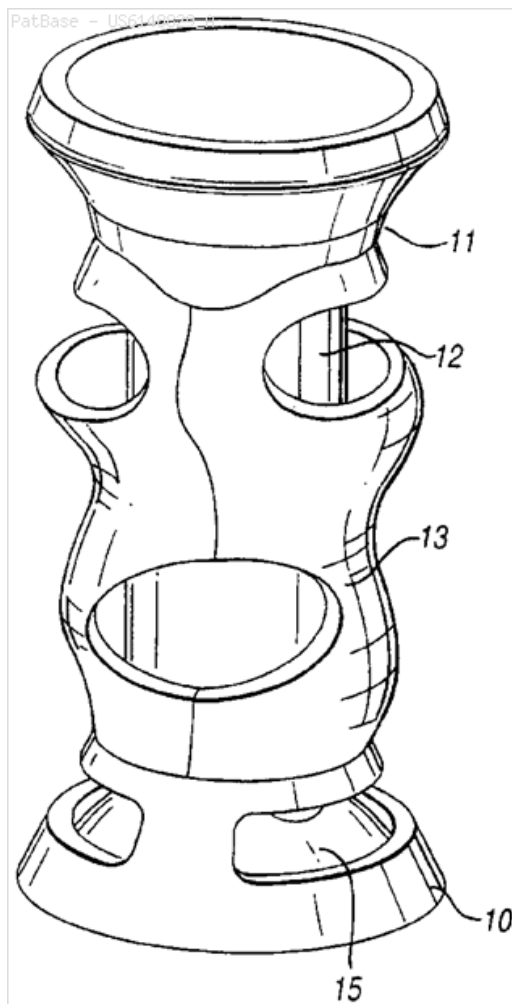
Title: Hair treatment device and method

Abstract: Source: US6148829A PCT No. PCT/GB97/01540 Sec. 371 Date Dec. 2, 1998 Sec. 102(e) Date Dec. 2, 1998 PCT Filed Jun. 6, 1997 PCT Pub. No. WO97/46132 PCT Pub. Date Dec. 11, 1997A method of treating a tress of hair including waving of the tress of hair includes the steps of inserting the tress of hair with a required formation into a hollow device and then while retained in hollow device the tress of hair is treated with a chemical substance. Preferably for convenience of use the hollow device comprises an extendible tube (12, 60). One end of the tube is secured to the root end of a tress of hair and the tube is extended lengthwise. The tube is then returned to its unextended state while ensuring that the tress of hair is retained within the tube. Preferably the device comprises a base element (10, 50) secured to one end of the tube, an upper element (11, 51) secured to a second end of the tube and a body member (13, 52) located intermediate the upper element and the base element to locate the upper element relative to the base element and to provide a housing for the extendible tube (12, 60). The base element is provided with means (18, 65) to secure the base element to a root end of a tress of hair and the upper element is formed to prevent egress of the tress of hair and to provide a funnel for application of treatment substance to the tress of hair.

Classifications:**International (IPC 8-9):** A45D2/00 A45D2/02 A45D2/06 A45D2/08

A45D2/10 A45D7/04 (Advanced/Invention);

A45D2/00 A45D2/10 A45D7/04 (Advanced/Non-invention)

International (IPC 1-7): A45D19/18 A45D2/00 A45D2/02 A45D2/06 A45D7/04**CPC:** A45D2/08 A45D2/10 A45D7/04 A45D2002/008 A45D2002/025**European:** A45D2/08 K45D2/00Z8 K45D2/02E K45D2/10 K45D7/04**US:** 132/207 132/222 132/270**Family:**

Publication number	Publication date	Application number	Application date
AT252855 E	20031115	AT19970925167T	19970606
AU199730402 A1	19980105	AU19970030402	19970606
BG102975 A	19990831	BG19980102975	19981201
BRP19709548 A	19990810	BR1997PI09548	19970606
CA2257099 AA	19981202	CA19972257099	19970606
CN1112872 C	20030702	CN19971095340	19970606
CN1221322 A	19990630	CN19971095340	19970606
CN1481744 A	20040317	CN20031023451	19970606
CZ9803934 A3	19990616	CZ19980003934	19970606
DE69725848 D1	20031204	DE19976025848	19970606
DE69725848 T2	20040819	DE19976025848T	19970606
DE69737613 D1	20070524	DE19976037613	19970606
DE69737613 T2	20080103	DE19976037613T	19970606
EP0909134 A1	19990421	EP19970925167	19970606
EP0909134 B1	20031029	EP19970925167	19970606
EP1360913 A2	20031112	EP20030015581	19970606
EP1360913 A3	20040512	EP20030015581	19970606
EP1360913 B1	20070411	EP20030015581	19970606
ES2210532 T3	20040701	ES19970925167T	19970606
ES2283685 T3	20071101	ES20030015581T	19970606
GB9611816 A0	19960807	GB19960011816	19960606
HU0002213 AB	20001128	HU20000002213	19970606
HU0002213 AC	20001228	HU20000002213	19970606
JP2000511798 T2	20000912	JP19980500342T	19970606
JP4001921 B2	20071031	JP19980500342T	19970606
KR20000016228 A	20000325	KR19980709798	19970606
NO985697 A	19990202	NO19980005697	19981204
NO985697 A0	19981204	NO19980005697	19981204
NZ333181 A	20000728	NZ19970333181	19970606
PL330350 A1	19990510	PL19970330350	19970606
SK166598 A3	20000214	SK19980001665	19970606
TR9802523 T2	19990322	TR19980002523T	19970606
US6148829 A	20001121	US19980194814	19981202
WO9746132 A1	19971211	WO1997GB01540	19970606

Priority:

EP19970925167 19970606

GB19960011816 19960606

WO1997GB01540 19970606

Probable Assignee: MITZEL JULIA L**Assignee(s):** (std): ALFREDO DE BENEDICTIS ; BENEDICTIS ALFREDO DE ; BENEDICTIS ALFREDO MILTON KEYN ; DE

BENEDICTIS ALFREDO

Assignee(s): DE BENEDICTIS ALFREDO MILTON KEYNES BUCKINGHAMSHIRE ; MITZEL JULIA L
Inventor(s): (std): ALFREDO DE BENEDICTIS ; BENEDICTIS ALFREDO DE ; DE BENEDICTIS ALFREDO ; SPRINGFIELD
Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; BORDEN LADNER GERVAIS LLP
Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GN GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG US UZ VN

7) Family number: 20662460 (WO0008967A1)

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Title: HAIR TREATMENT DEVICE AND METHOD

Abstract: A device for treating a tress of hair including an extendible elastic tube (60) into which the tress of hair to be treated is inserted. The device comprises a base element (50) secured to one end of the tube, an upper element (51) secured to a second end of the tube and a body member (52) located intermediate the upper element and the base element to locate the upper element relative to the base element and to provide a housing for the extendible tube. The base element is provided with means (64, 65) to secure the base element to a root end of a tress of hair and the upper element is formed to prevent egress of the tress of hair and to provide a funnel (56) for application of treatment substance to the tress of hair. The body member is constructed such as to permit adjustment of a dimension, for example an axial dimension, of the body member. Accordingly the body member comprises a first tubular element (72) and a second tubular element (73) which is a sliding fit in the first tubular element. Detent means (74, 75) may be provided to retain a desired relative location of the first and second elements.

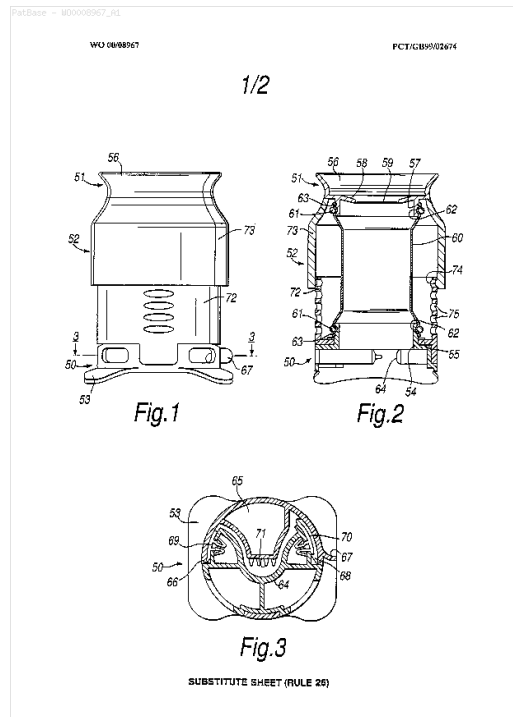
Classifications:

International (IPC 8-9): A45D2/02 (Advanced/Invention); A45D2/00 (Core/Invention)

International (IPC 1-7): A45D2/02 A45D2/08 A45D2/20

CPC: A45D2/02 A45D2002/025

European: A45D2/02 K45D2/02E



Family:

Publication number	Publication date	Application number	Application date
AU199953813 A1	20000306	AU19990053813	19990813
AU199953813 A5	20000306	AU19990053813	19990813
GB2340393 A1	20000223	GB19990019113	19990813
GB9817618 A0	19981007	GB19980017618	19980814
GB9919113 A0	19991013	GB19990019113	19990813
WO0008967 A1	20000224	WO1999GB02674	19990813

Priority:

GB19980017618 19980814 WO1999GB02674 19990813

Probable Assignee: DE BENEDICTIS ALFREDO

Assignee(s): (std): ALFREDO DE BENEDICTIS ; BENEDICTIS ALFREDO DE

Assignee(s): DE BENEDICTIS ALFREDO

Inventor(s): (std): DE BENEDICTIS ALFREDO ; BENEDICTIS ALFREDO DE

Inventor(s): ALFREDO DE BENEDICTIS

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

8) Family number: 31934201 (US6647989B)

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Title: Hair treatment device and method

Abstract: Source: US6647989B A device for use in hair treatment comprises a tube (10) having a wall constructed of

elements (11, 12) extending in a direction inclined to the length of the tube, or a wall constructed of interwoven fibres (11, 12). As a result of its construction when the tube is contracted from an elongate state to a contracted state, the transverse dimension of the tube increases to permit insertion of a tress of hair through the tube. After insertion of the hair through the tube, the tube is extended which causes the transverse dimension to decrease and compress together the hairs of the tress. The tube is then manipulated into a desired form to thereby impart a required form to the tress of hair. The tube may be performed in the desired form and after insertion of the tress of hair is permitted to revert to the desired form. Restraints (521, 522) may be applied to the tube and hair contained therein and then the tube between the restraints is contracted lengthwise to cause the transverse dimension thereof to increase.

Classifications:

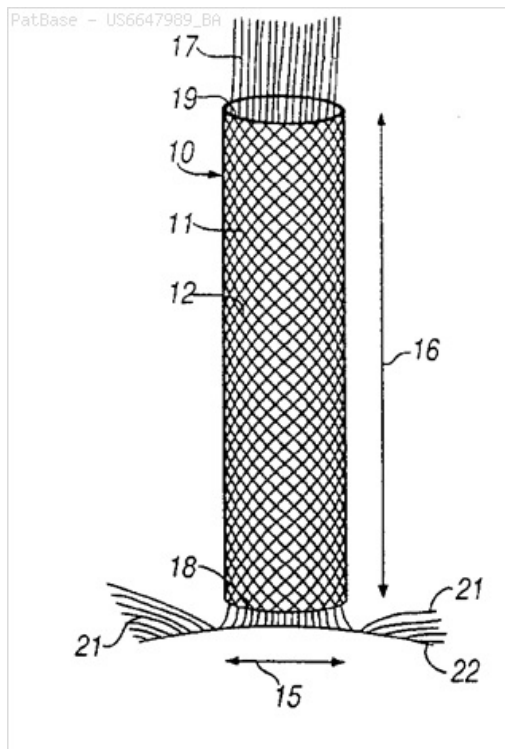
International (IPC 8-9): A45D2/00 A45D2/02 A45D2/18 A45D2/32 A45D6/08 A45D7/00 (Advanced/Invention); A45D2/00 A45D6/00 A45D7/00 (Core/Invention)

International (IPC 1-7): A45D2/00 A45D2/02 A45D2/18 A45D2/32 A45D6/00 A45D7/00

CPC: A45D2/00 A45D2/02 A45D2/18 A45D2/20 A45D6/08 A45D7/00 A45D2002/025

European: A45D2/00 A45D2/02 A45D2/18 A45D2/20 A45D6/08 A45D7/00 K45D2/02E

US: 132/210 132/222 132/223 132/273



Family:

Publication number	Publication date	Application number	Application date
AU200033093 A1	20001016	AU20000033093	20000321
AU200033093 A5	20001016	AU20000033093D	20000321
CN1135083 C	20040121	CN20008005893	20000321
CN1346241 A	20020424	CN20008005893	20000321
DE60020102 D1	20050616	DE20006020102	20000321
DE60020102 T2	20060126	DE20006020102T	20000321
EP1168940 A1	20020109	EP20000911099	20000321
EP1168940 B1	20050511	EP20000911099	20000321
ES2242607 T3	20051116	ES20000911099T	20000321
GB9907166 A0	19990526	GB19990007166	19990330
GB9909107 A0	19990616	GB19990009107	19990422
JP2002539874 T2	20021126	JP20000607509T	20000321
JP4173285 B2	20081029	JP20000607509T	20000321
TH42322 A	20010103	TH20001001001	20000327
US6647989 BA	20031118	US20010937704	20011001
WO0057744 A1	20001005	WO2000GB01043	20000321

Priority:

GB19990007166 19990330 GB19990009107 19990422 WO2000GB01043 20000321

Probable Assignee:

Assignee(s): (std): BENEDICTIS ALFREDO DE ; DE BENEDICTIS ALFREDO

Assignee(s): HAIR FLAIR LTD ; ALFREDO DE BENEDICTIS

Inventor(s): (std): BENEDICTIS ALFREDO DE ; DE BENEDICTIS ALFREDO

Inventor(s): ALFREDO DE BENEDICTIS

Agent(s): NAGAI HIROSHI

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

9) Family number: 41519538 (US2010263684A)

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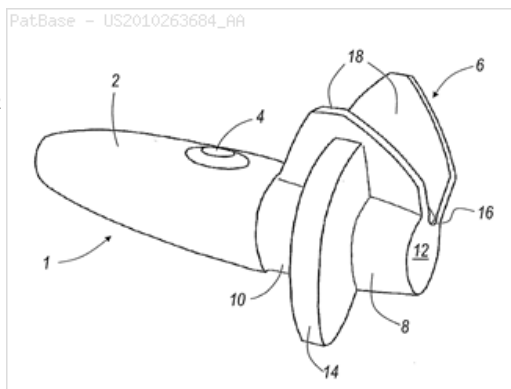
Title: HAIR STYLING AID

Abstract: Source: US2010263684A The invention relates to a hair styling aid (1), in particular for curling hair. The hair styling aid (1) comprises guide means (16) for receiving a length of hair to be styled, and a rotatable element (20). In use, the rotatable element (20) rotates relative to the guide means (16), pushing a portion of the hair to one side and thereby causing it to be wound around a central protrusion (36).

Classifications:

International (IPC 8-9): A45D1/00 A45D1/02 A45D1/04 A45D1/10 A45D1/16 A45D19/16 A45D2/00 A45D2/02 A45D2/36 A45D20/12

A45D6/00 A45D6/02 A45D6/04 A45D7/02 (Advanced/Invention);
A45D1/02 A45D1/16 A45D20/12 (Advanced/Non-invention);
A45D1/00 A45D2/00 (Core/Invention)
CPC: A45D1/00 A45D1/02 A45D1/16 A45D6/02 A45D2/367
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European: A45D1/00 A45D2/02 A45D2/36E K45D1/02 K45D1/16
K45D20/12 K45D200/05H6
US: 132/211 132/230 132/237 132/238 132/271 132/272



Family:

Publication number	Publication date	Application number	Application date
CN101896091 A	20101124	CN200880120675	20081217
CN101896091 B	20140806	CN200880120675	20081217
CN104026843 A	20140910	CN201410290438	20081217
CN104026844 A	20140910	CN201410290437	20081217
CN104042020 A	20140917	CN201410290381	20081217
CN104042021 A	20140917	CN201410290382	20081217
CN104042022 A	20140917	CN201410290385	20081217
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CN104116294 A	20141029	CN201410294270	20081217
DE602008024158 D1	20130620	DE200860024158T	20081217
DK2242393 T3	20130722	DK20080861787T	20081217
DK2620075 T3	20170717	DK20130164734T	20081217
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EP3009027 A3	20160525	EP20150195739	20081217
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ES2628892 T3	20170804	ES20130164734T	20081217
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GB2455716 B2	20101124	GB20070024555	20071217
GB2455716 C	20130220	GB20070024555	20071217
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JP2014000453 A2	20140109	JP20130182129	20130903
JP2015144845 A2	20150813	JP20150062440	20150325
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US2013025621 AA	20130131	US20120633060	20121001
US2015000689 AA	20150101	US20140490736	20140919
US2016353853 AA	20161208	US20160227503	20160803
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WO09077747 A2	20090625	WO2008GB04146	20081217
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Priority:

EP20080861787	20081217	EP20130164734	20081217	GB20070024555	20071217
JP20100538887	20081217	JP20130182129	20081217	JP20150062440	20150325
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US20140490736	20140919	US20160227503	20160803		

Probable Assignee: TF3 LTD

Assignee(s): (std): ALFREDO DE BENEDICTIS ; BENEDICTIS ALFREDO DE ; DE BENEDICTIS ALFREDO ; TF3 LTD

Assignee(s): TF3 LIMITED

Inventor(s): (std): BENEDICTIS ALFREDO DE ; DEBENEDICTIS ALFREDO ; DE BENEDICTIS ALFREDO ; ALFREDO DE BENEDICTIS ; DE BENEDICTIS ALFREDO

Agent(s): GOY WOLFGANG DIPL PHYS; GEE STEVEN WILLIAM; SANZ BERMELL SANZ BERMELL ALEJANDRO; PATENT CORPORATE BODY ARCO PATENT OFFICE; MUESERREF AKYOL; INTELLECTUAL PROPERTY / TECHNOLOGY LAW; INTELLECTUAL PROPERTY TECHNOLOGY LAW; HULTQUIST PLLC; STEVEN J; BENNETT ADRIAN ROBERT JAMES

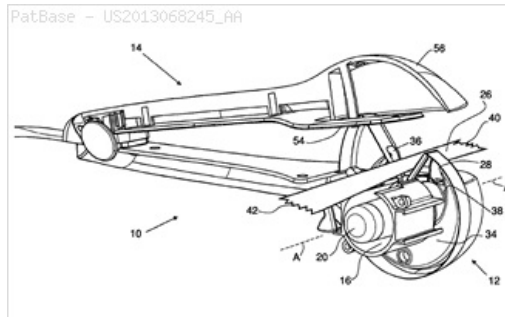
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: HAIR STYLING DEVICE

Abstract: Source: US2013068245A This invention relates to a hair styling device (10) having a body (12) defining a chamber (16) adapted to accommodate a length of hair (26), the length of hair being styled whilst it is located within the chamber. The chamber has a primary opening (24) through which the length of hair may pass into the chamber. A rotatable element (34) is provided which is adapted to engage the length of hair adjacent to the primary opening. An elongate member (20) is located within the chamber (16), the length of hair being wound around the elongate member by the rotatable element. The device has a handle (14) which may be gripped by a user, the handle comprising a first handle part (62) and a second handle part (60), the first handle part (62) being connected to the body (12) and the second handle part (60) being movable relative to the first handle part (62). The second handle part can carry a panel (56) which is adapted to close the primary opening (24).

Classifications:

International (IPC 8-9): A45D A45D1/00 A45D1/04 A45D1/06 A45D1/10 A45D1/20 A45D2/00 A45D2/02 A45D2/10 A45D2/12 A45D2/36 A45D20/12 A45D6/00 A45D6/02 A45D7/02 (Advanced/Invention); A45D1/06 A45D2/36 (Advanced/Non-invention); A45D2/02 A45D2/12 (Core/Invention); A45D (Subclass/Invention)
CPC: A45D7/02 A45D1/20 A45D1/04 A45D2/36 A45D6/00 A45D6/02 A45D1/06 A45D2/362 A45D2/367 A45D1/10 A45D20/12 A45D2006/005 A45D2200/057 A45D2/02 A45D2/10
European: A45D2/02 A45D2/10 K45D2/36A K45D2/36E
US: 132/211 132/230 132/237 132/238



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Publication number	Publication date	Application number	Application date
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ES2593030 T3	20161205	ES20150156384T	20111216
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HU030458 T2	20170529	HU20150156384T	20111216
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MX2013006690 A1	20130729	MX20130006690	20111216
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SG193255 A1	20131030	SG20130065834	20111216
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US9788625 BB	20171017	US20150673424	20150330
WO12080751 A2	20120621	WO2011GB52506	20111216
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Priority:

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US20160227332 20160803		

Probable Assignee: TF3 LIMITED

Assignee(s): (std): DE BENEDICTIS ALFREDO ; HUGHES MARK CHRISTOPHER ; TF3 LTD

Assignee(s): TF3 LIMITED

Inventor(s): (std): ALFREDO DE BENEDICTIS ; ALFREDO DEBENEDICTIS ; BENEDICTIS ALFREDO ; BENEDICTIS ALFREDO DE ; DE BENEDICTIS ALFREDO ; DE BENEDIKTIS ALFREDO ; DE BENEKTIS ALFREDO ; DEBENEDICTIS ALFREDO ; HUGHES MARK CHRISTOPHER ; KHYUZ MARK KRISTOFER ; MARK CHRISTOPHER HUGHES

Inventor(s): DEBENEDICTIS ALFREDO CRUMLIN ; HUGHES MARK CHRISTOPHER CLENT ; DE BENEDICTIS ALFREDO CRUMLIN

Agent(s): TAYLOR MICHAEL MR; BORDEN LADNER GERVAIS LLP; SILVA AND CIA PATENTES Y MARCAS LTDA; LUZ CLEMENCIA DE PAEZ; MEPAT PATENTANWAELE DR MEHL MIKUS GOY DR DROBNIK PARTNERSCHAFT MBB; GEE STEVEN WILLIAM; SANZ BERMELL SANZ BERMELL ALEJANDRO; HENRY GOH S PTE LTD; HULTQUIST PLLC; STEVEN J; GEE STEVEN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 49255426 (US2014076351A)

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Title: HAIR STYLING DEVICE

Abstract: Source: US2014076351A This invention relates to an improved hair styling device, and provides a hair styling device for imparting a wave to a tress of hair. The device comprises a tube (110) having a longitudinal axis, the tube being open at at least one of its longitudinal ends whereby the tress of hair can be introduced into the tube. The tube is longitudinally extendable between a non-extended condition and an extended condition. The inside of the tube has at least one barrier (120) which can engage the tress of hair as the tube moves towards its non-extended condition, the barrier controlling the deformation of the tress of hair and thereby controlling the form of the wave produced in the tress of hair.

Classifications:

International (IPC 8-9): A45D A45D2/00 A45D2/02 A45D2/08

A45D2/14 A45D2/18 A45D2/38 A45D7/02 A45D8/00

A45D8/14 (Advanced/Invention);

A45D2/02 (Advanced/Non-invention);

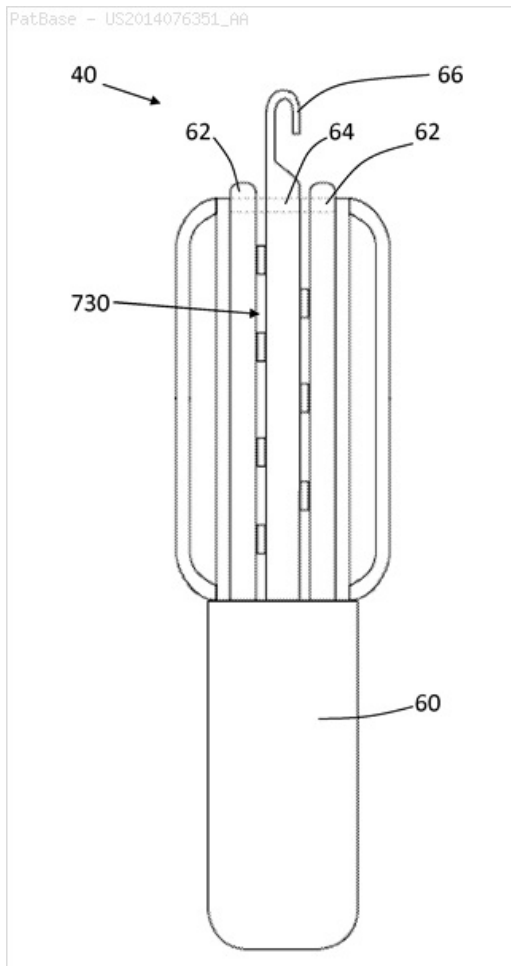
A45D2/14 A45D2/18 (Core/Invention);

A45D (Subclass/Invention)

CPC: A45D2/146 A45D2/00 A45D2/18 A45D2002/025

European: A45D2/00 A45D2/14T A45D2/18 K45D2/02E

US: 1/1 132/223

**Family:**

Publication number	Publication date	Application number	Application date
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GB201107671 A0	20110622	GB20110007671	20110509
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JP2014512929 T2	20140529	JP20140509814T	20120508
JP6201985 B2	20170927	JP20140509814T	20120508
KR20140064731 A	20140528	KR20137031418	20120508
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PE22172014 A1	20150109	PE20130002470	20120508
RU2013149717 A	20150620	RU20130149717	20120508
RU2598566 C2	20160927	RU20130149717	20120508
SG194861 A1	20131230	SG20130082979	20120508
TH159035 A	20170106	TH20131006418	20120508
TW201247140 A	20121201	TW20120116384	20120508
TWI565436 B	20170111	TW20120116384	20120508
US2014076351 AA	20140320	US20120116124	20120508
US9138039 BB	20150922	US20120116124	20120508
WO12153118 A1	20121115	WO2012GB50999	20120508
ZA201308452 A	20140730	ZA20130008452	20131111

Priority:

EP20120723230 20120508 GB20110007671 20110509 WO2012GB50999 20120508

Probable Assignee: SF3 LIMITED

Assignee(s): (std): DEBENEDICTIS ALFREDO ; HOLLAND JANUSZ LUCIEN ; SF3 LTD

Assignee(s): SF3 LIMITED

Inventor(s): (std): DE BENEDIKTIS ALFREDO ; DEBENEDICTIS ALFREDO ; HOLLAND JANUSZ LUCIEN ; KHOLLAND YANUSH LYUSEN

Inventor(s): ALFREDO DEBENEDICTIS ; JANUSZ LUCIEN HOLLAND ; DEBENEDICTIS ALFREDO CRUMLIN

Agent(s): TAYLOR MICHAEL MR; ARMSTRONG R CRAIG; MERIZZI RAMSBOTTOM AND FORSTER; SILVA AND CIA
PATENTES Y MARCAS LTDA; LUZ CLEMENCIA DE PAEZ; GEE STEVEN WILLIAM; SANZ BERMELL SANZ
BERMELL ALEJANDRO; HULTQUIST PLLC; STEVEN J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU
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MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM
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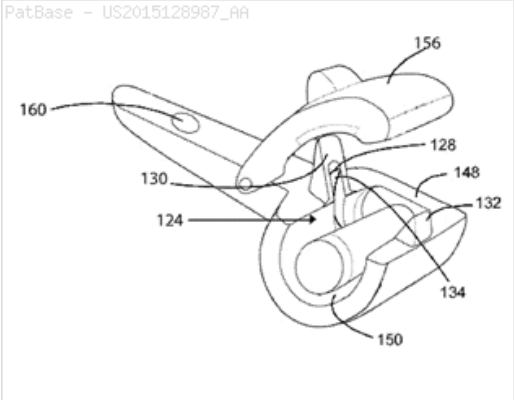
12) Family number: 51758157 (US2015128987A) © PatBase

Title: HAIR STYLING DEVICE

Abstract: Source: US2015128987A This invention relates to a hair styling device. According to one aspect of the invention the hair styling device comprises a body (112) defining a chamber (116) adapted to accommodate a length of hair, the chamber having a primary opening (124) through which the length of hair may enter the chamber; a rotatable element (134) adapted to engage the length of hair adjacent to the primary opening; an elongate member (120) around which, in use, the length of hair is wound by the rotatable element; a guide part (254) adapted to guide the length of hair towards the primary opening, the rotatable element being rotatable relative to the guide part, the guide part being movable relative to the body. The movable guide part may also serve to press the length of hair towards the primary opening.

Classifications:

International (IPC 8-9): A45D A45D1/04 A45D1/06 A45D2/00
A45D2/02 A45D2/06 A45D2/10 A45D2/12 A45D2/36 A45D6/00
A45D6/02 (Advanced/Invention);
A45D2/02 (Core/Invention);
A45D (Subclass/Invention)
CPC: A45D2/36 A45D2/00 A45D6/00 A45D2/367 A45D6/02
A45D2002/025 A45D1/04 A45D1/06 A45D2/02
US: 132/230 132/238



Family:

Publication number	Publication date	Application number	Application date
AR091404 AA	20150204	AR2013P102045	20130611
AU2013276307 AA	20131219	AU20130276307	20130611
AU2013276307 BB	20170420	AU20130276307	20130611
AU2015201590 AA	20150416	AU20150201590	20150327
AU2015201590 BB	20170420	AU20150201590	20150327
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GB2521783 A1	20150701	GB20150005356	20130611
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Priority:

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Probable Assignee: TF3 LIMITED

Assignee(s): (std): DE BENEDICTIS ALFREDO ; HOLLAND JANUSZ LUCIEN ; HUGHES MARK CHRISTOPHER ; TF3 LTD ; TFZ LTD

Assignee(s): TF3 LTDSTUDIO 11MAGREAL INDUSTRIAL ESTATEFREETH STREETB16 0DZBIRMINGHAMGB ; TF3 LIMITED

Inventor(s): (std): ALFREDO DE BENEDICTIS ; BENEDICTIS ALFREDO DE ; DE BENEDICTIS ALFREDO ; DE BENEDIKTIS ALFREDO ; DEBENEDICTIS ALFREDO ; HOLLAND JANUSZ LUCIEN ; JANUSZ LUCIEN HOLLAND ; KHOLLAND YANUSH LYUSEN ; KHYUZ MARK KRISTOFER ; MARK CHRISTOPHER HUGHES ; HUGHES MARK CHRISTOPHER

Inventor(s): HUGHES MARK CHRISTOPHERGB ; HOLLAND JANUSZ LUCIENGB ; DE BENEDICTIS ALFREDOGB ; ALFREDO DEBENEDICTIS

Agent(s): ANDERSON TAYLOR AND ASSOCIATES; GOWLING LAFLEUR HENDERSON LLP; SILVA AND CIA PATENTES Y MARCAS LTDA; LUZ CLEMENCIA DE PAEZ; GEE STEVEN WILLIAM; SANZ BERMELL SANZ BERMELL ALEJANDRO; HENRY GOH S PTE LTD; HULTQUIST PLLC; STEVEN J; GEE STEVEN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

13) Family number: 53471903 (US2017006989A)

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Title: HAIR STYLING DEVICE

Abstract: Source: US2017006989A This invention relates to a hair styling device, and in particular a hair waving device. The device has a chamber for containing the length of hair, and a first forming member and a second forming member within the chamber, a first hair-receiving region between the first forming member and the second forming member. A first driving member can move relative to the first forming member between an inoperative position outside the first hair-receiving region and an operative position within the first hair-receiving region. The first driving member drives a portion of the length of hair into the first hair-receiving region to form a first wave in the length of hair. The device can comprise multiple forming members and multiple driving members to produce multiple waves.

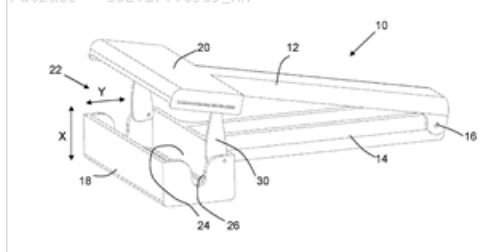
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Family:

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AU2014213769 AA	20140814	AU20140213769	20140203
CA2938585 AA	20160802	CA20142938585	20140203
CN105939632 A	20160914	CN201480074199	20140203
CO20160001427 A2	20170209	CO20160001427	20160830
CR20160401 A	20161110	CR20160000401	20140203
EP3102063 A1	20161214	EP20140706929	20140203
GB201302043 A0	20130320	GB20130002043	20130205
GB201514523 A0	20150930	GB20150014523	20140203
GB2526716 A1	20151202	GB20150014523	20140203
IN201617029971 A	20161209	IN201617029971	20160901
JP2017505209 T2	20170216	JP20160564421T	20140203
KR20160108482 A	20160919	KR20167022037	20140203
MX2016010021 A1	20170509	MX20160010021	20140203
TH167413 A	20170907	TH20161004326	20140203
TW201440686 A	20141101	TW20140103793	20140205
US2017006989 AA	20170112	US20140115686	20140203
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