

Title (en)

A device to treat hair using ultrasound

Title (de)

Vorrichtung zur Haarbehandlung durch Ultraschall

Title (fr)

Dispositif pour le traitement de cheveux à l'aide d'ultrasons

Publication

EP 2095737 A1 20090902 (EN)

Application

EP 08152114 A 20080229

Priority

EP 08152114 A 20080229

Abstract (en)

With a device (1) to treat hair using ultrasound having two clamps (2, 3), which are connected to one another via a joint (4) and which swivel, an oscillating body (5) is arranged on an interior side (6) of a clamp (3). The oscillating body (5) is positioned such that a strand of hair (7), which is clamped between the clamps (2, 3) when the clamps are closed, comes into contact with the oscillating body (5) or is touching it. An ultrasound generator (8) and a resonator (9) are connected to one another and generate an ultrasound frequency for the oscillating body (5). So that not only the ultrasound vibration is transmitted to the strand of hair (7) and that a product (27) is better distributed in the hair, but that also a quicker reaction of the product occurs on the hair, it is suggested to additionally design the oscillating body (5) as a heat generator. This is achieved in that the direction of oscillation (11) of the oscillating body (5) is the same as the direction (12) in which the clamp (3) having the oscillating body (5) extends.

IPC 8 full level

A45D 1/04 (2006.01); **A45D 7/02** (2006.01)

CPC (source: EP US)

A45D 1/04 (2013.01 - EP US); **A45D 7/02** (2013.01 - EP US); **A45D 7/06** (2013.01 - EP US); **A45D 19/0041** (2021.01 - EP); **A45D 1/20** (2013.01 - EP US); **A45D 19/0041** (2021.01 - US); **A45D 19/16** (2013.01 - EP US); **A45D 34/04** (2013.01 - EP US); **A45D 2200/207** (2013.01 - EP US)

Citation (applicant)

- EP 1728450 A2 20061206 - MATSUSHITA ELECTRIC WORKS LTD [JP]
- JP 2002282788 A 20021002 - MATSUSHITA ELECTRIC WORKS LTD

Citation (search report)

- [XY] JP 2002282788 A 20021002 - MATSUSHITA ELECTRIC WORKS LTD
- [Y] WO 2007037143 A2 20070405 - MATSUSHITA ELECTRIC WORKS LTD [JP], et al
- [AD] EP 1728450 A2 20061206 - MATSUSHITA ELECTRIC WORKS LTD [JP]
- [A] EP 1728449 A1 20061206 - MATSUSHITA ELECTRIC WORKS LTD [JP]

Cited by

KR20130008264A; CN102740726A; FR2976804A1; GB2468176A; WO2012107776A2; WO2011098349A1; WO2013139581A1; WO2012107776A3; WO2012175734A1; US10863811B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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