

Title (en)
HAIR STYLING DEVICE

Title (de)
HAARSTYLINGVORRICHTUNG

Title (fr)
DISPOSITIF DE COIFFAGE

Publication
EP 3681333 A1 20200722 (EN)

Application
EP 18759977 A 20180905

Priority

- EP 17190268 A 20170910
- EP 18153537 A 20180125
- EP 2018073802 W 20180905

Abstract (en)
[origin: WO2019048446A1] A hair styling device comprises an optical radiation source (L) for radiating hair (H), a sensor unit (S) for measuring effects from radiating hair (H), and a feedforward control device for controlling the optical radiation source (L) in dependence on a signal from the sensor unit (S). The optical radiation source (L1, L2) may produce a first flash having a first energy density that may be lower than required for photo-thermal hair reshaping, the optical radiation source being controlled to produce a subsequent flash in dependence on a sensor signal obtained in response to the first flash, which subsequent flash may have at least the first energy density. The sensor unit (S) may include a sensor arranged before the optical radiation source in a hair flow direction. The hair styling device may comprise, along a direction in which the hair (H) is guided, a first sensor (S1), a first LED unit (L1) being controlled in dependence on a signal from the first sensor (S1), a second sensor (S2), and a second LED unit (L2) being controlled in dependence on a signal from the second sensor (S2). The direction in which hair is guided through the hair styling device may determine which part of the optical radiation source will act as the first LED unit (L1). The hair styling device may comprise a drive mechanism (D) to move the hair (H) along the optical radiation source (L) at a speed controlled by the feedforward control device in dependence on the signal from the sensor unit (S).

IPC 8 full level
A45D 1/04 (2006.01); **A45D 2/00** (2006.01)

CPC (source: EP RU US)
A45D 1/04 (2013.01 - EP RU US); **A45D 1/28** (2013.01 - EP US); **A45D 2/001** (2013.01 - EP US); **A45D 2/367** (2013.01 - US);
A45D 2200/205 (2013.01 - EP US)

Citation (search report)
See references of WO 2019048446A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2019048446 A1 20190314; CN 111050594 A 20200421; CN 111050594 B 20210427; EP 3681333 A1 20200722; EP 3681333 B1 20210120;
RU 2734471 C1 20201016; US 2020281338 A1 20200910

DOCDB simple family (application)
EP 2018073802 W 20180905; CN 201880058506 A 20180905; EP 18759977 A 20180905; RU 2020113279 A 20180905;
US 201816644527 A 20180905