

Title (en)
PERMANENT-WAVE CURLER

Publication
EP 0034770 B1 19841128 (DE)

Application
EP 81101002 A 19810213

Priority
DE 3006459 A 19800221

Abstract (en)
[origin: ES256888U] Permanent wave roller having a rotation-symmetrical winding rod or winding tube and a hair fastening means, wherein the winding rod or winding tube has three segments adjoining one another in the direction of the axis of rotation, the middle segment (4) of which has the smallest outside diameter while the outer two segments (5, 6) are of different length and have a gradually increasing outside diameter, the enlargement of this outside diameter per unit of length increasing gradually in each case from the side adjacent the center segment (4) toward the associated roller end (FIG. 2).

IPC 1-7
A45D 2/14

IPC 8 full level
A45D 2/14 (2006.01)

CPC (source: EP US)
A45D 2/14 (2013.01 - EP US)

Cited by
FR2762976A1; FR2846860A1; US6314968B1; WO9821997A1

Designated contracting state (EPC)
AT BE CH FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0034770 A2 19810902; EP 0034770 A3 19820120; EP 0034770 B1 19841128; AT E10428 T1 19841215; AU 544448 B2 19850530; AU 6755581 A 19810827; BR 8100998 A 19810825; CA 1177356 A 19841106; DE 3006459 A1 19810903; DE 3006459 C2 19900111; ES 256888 U 19810701; ES 256888 Y 19811216; US 4424821 A 19840110; ZA 811183 B 19820331

DOCDB simple family (application)
EP 81101002 A 19810213; AT 81101002 T 19810213; AU 6755581 A 19810223; BR 8100998 A 19810219; CA 371360 A 19810220; DE 3006459 A 19800221; ES 256888 U 19810220; US 23576281 A 19810218; ZA 811183 A 19810223