

Title (en)  
Curling iron with retractable bristles or teeth.

Title (de)  
Lockenstab mit einziehbaren Borsten oder Zinken.

Title (fr)  
Fer à friser avec soies ou dents escamotables.

Publication  
**EP 0379670 A2 19900801 (DE)**

Application  
**EP 89121647 A 19891123**

Priority  
DE 3902111 A 19890125

Abstract (en)  
[origin: JPH02228906A] PURPOSE: To enable withdrawal of a hair winder barrel member without a step of unwinding the hair once wound thereon by manipulating a bristle or sawtooth-like multiple-protrusion adjusting device according to aeration temperatures, with more than one temperature sensing elements of a shape retentive metal provided in an aeration passage. CONSTITUTION: Air 2 is fed from main body 1 to the interior of hair winder barrel member 3 through a heater and a blower, then getting released to the exterior via aeration hole 4. Inside hair wind barrel member 3, adjusting device 5 is installed axially movably, and also serves as holder of bristle 6. The adjusting device 5 is cylindrical and has outlet ports 7 for aeration in its periphery. Bristle 6 is implanted in bundles which are protruding to the exterior from the respective aeration holes 4. The adjusting device 5 is held axially by a thermosensitive elements 8, each of which is made of a shape memory alloy, allowing various shapes such as a U-shape, a coil-like form of a split spring shape to be formed. Preferably, the bristle or sawtooth-like multiple-protrusion holder is formed pivotable, and in this case, the thermosensitive element is preferably formed in a split spring shape.

Abstract (de)  
Bei einem Lockenstab (1) mit einziehbaren Borsten (6) oder Zinken, bei welchem ein erwärmter Luftstrom (2) durch Austrittsöffnungen (7) in einem zylindrischen Wickelkörper (3) führbar ist, sind die Borsten (6) oder Zinken in Abhängigkeit von der Temperatur des Luftstroms einziehbar. Dabei ist vorzugsweise im Luftstrom ein temperaturabhängiges Element (8) aus einer Formgedächtnis-Legierung vorgesehen.

IPC 1-7  
**A45D 1/04**; **A45D 1/18**; **A45D 20/50**

IPC 8 full level  
**A45D 1/00** (2006.01); **A45D 1/04** (2006.01); **A45D 1/18** (2006.01); **A45D 2/36** (2006.01); **A45D 20/50** (2006.01)

CPC (source: EP US)  
**A45D 1/18** (2013.01 - EP US); **A45D 20/50** (2013.01 - EP US)

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AT BE CH DE ES FR GB GR IT LI LU NL SE

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**EP 0379670 A2 19900801**; **EP 0379670 A3 19910403**; **EP 0379670 B1 19940126**; AT E100680 T1 19940215; DE 3902111 A1 19900726; DE 58906834 D1 19940310; ES 2050763 T3 19940601; JP 2750927 B2 19980518; JP H02228906 A 19900911; US 4971081 A 19901120

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