

Title (en)
A curling device

Title (de)
Kräuseleinrichtung

Title (fr)
Dispositif pour courber

Publication
EP 1358808 A1 20031105 (EN)

Application
EP 03425261 A 20030428

Priority
IT BO20020259 A 20020503

Abstract (en)
A curling device (1) for a filter tip attachment comprises an element (13) placed in contact with a strip (3) of paper material advancing continuously along a given path (P), and serving to deform the strip (3) in such a way that single tipping papers (7) obtained by cutting the strip (3) are invested with a curled profile; the curling device (1) is associated with a mechanism (25) such as will cause it to vibrate, describing rectilinear or looped trajectories at a predetermined frequency, so as to reduce friction between the curling element (13) and the strip (3). <IMAGE>

IPC 1-7
A24C 5/47

IPC 8 full level
A24C 5/47 (2006.01); **B65H 77/00** (2006.01)

CPC (source: EP US)
A24C 5/471 (2013.01 - EP US)

Citation (search report)

- [X] US 2002020419 A1 20020221 - MAIWALD BERTHOLD [DE], et al
- [A] US 3962957 A 19760615 - HINZMANN ALFRED
- [A] EP 0795278 A1 19970917 - GD SPA [IT]

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ITBO20110211A1; KR20170068522A; CN106998792A; DE202012101461U1; WO2016071699A1; WO2015001316A1; US11291861B2

Designated contracting state (EPC)
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EP 1358808 A1 20031105; EP 1358808 B1 20051130; AT E311123 T1 20051215; CN 1285295 C 20061122; CN 1454536 A 20031112; DE 60302488 D1 20060105; DE 60302488 T2 20060810; IT BO20020259 A0 20020503; IT BO20020259 A1 20031103; US 2003205235 A1 20031106

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