

Title (en)

PAPER CIGARETTE FILTER AND METHOD AND APPARATUS FOR MANUFACTURING THE SAME

Title (de)

FILTER FÜR ZIGARETTEN AUS PAPIER, VERFAHREN UND VORRICHTUNG ZU SEINER HERSTELLUNG

Title (fr)

FILTRE POUR CIGARETTE EN PAPIER ET PROCÉDÉ ET APPAREIL POUR SA FABRICATION

Publication

EP 4327670 A1 20240228 (EN)

Application

EP 22198517 A 20220928

Priority

KR 20220105861 A 20220824

Abstract (en)

In order to improve manufacturing precision, the present disclosure provides an apparatus for manufacturing a paper cigarette filter, the apparatus including: a supply device (10) configured to withdraw paper tow (211) made of a paper material at a predetermined withdrawal speed and transfer the withdrawn paper tow; a crimping device (20) disposed on one side of the supply device that corresponds to a direction in which the paper tow is transferred and including a pair of crimping rollers (21) from which a plurality of crimping protrusions protrude radially outward in a circumferential direction so that the paper tow is crimped while passing between the crimping rollers; a cutting device (30) disposed on one side of the crimping rollers and including a plurality of cutting blades configured to cut the paper tow so that the paper tow is separated into a plurality of separated paper portions (211a, 211b, 211c) at predetermined gaps in a width direction; an embossing formation device (40) disposed on one side of the cutting device and including an embossing roller (41) having a plurality of embossing protrusions (41a) protruding from an outer circumferential surface thereof so that a plurality of capsule-holding embossing grooves are formed to be recessed in a surface of at least any one of the separated paper portions; and a capsule addition device (80) disposed on one side of the embossing roller and configured to add a capsule (220) from top to bottom at predetermined gaps in a longitudinal direction on the surface of at least any one of the separated paper portions in which the embossing grooves are formed.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

KR 100969596 B1 20100713

Citation (search report)

- [YA] US 2021378288 A1 20211209 - CIESLIKOWSKI BARTOSZ [PL], et al
- [YA] WO 2021250408 A1 20211216 - BRITISH AMERICAN TOBACCO INVESTMENTS LTD [GB]
- [Y] US 2915069 A 19591201 - SCHUR MILTON O

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

Designated validation state (EPC)

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