

Title (en)

FILTER CIGARETTE MANUFACTURING EQUIPMENT, MANUFACTURING METHOD THEREFOR AND FILTER CIGARETTE

Title (de)

AUSRÜSTUNG ZUR HERSTELLUNG VON FILTERZIGARETTEN, HERSTELLUNGSVERFAHREN DAFÜR UND FILTERZIGARETTE

Title (fr)

ÉQUIPEMENT DE FABRICATION DE CIGARETTES À FILTRE, PROCÉDÉ DE FABRICATION ASSOCIÉ ET CIGARETTES À FILTRE

Publication

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Application

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Priority

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Abstract (en)

[origin: EP3123876A1] A filter cigarette manufacturing machine and a filter cigarette manufacturing method according to the present invention are for a double filter cigarette (WFC), which is an intermediate product in a manufacturing process of a filter cigarette (FC). Two perforation lines (16) are formed by irradiating double-width paper (WP) of the double filter cigarette (WFC) with laser beams from a laser perforation device(40). On the other hand, before formation of the perforation lines (16), a glue transfer roller (48) applies glue to a reverse side of a paper web (PW) excluding regions which correspond to the perforation lines (16) and become non-adhesive regions (R1 and R2) extending over an entire circumference of the double-width paper (WP), where the paper web (PW) is used to form the double-width paper (WP). Besides, the present invention also provides a filter cigarette (FC) provided with the perforation line (16) formed in the non-adhesive regions (R1 and R2) of tipping paper (14).

IPC 8 full level

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A24D 3/043 (2013.01 - EP RU US)

Citation (search report)

- [XAY] EP 2545791 A1 20130116 - GD SPA [IT]
- [YA] US 4361156 A 19821130 - HALL FLOYD V
- [XA] US 2010108084 A1 20100506 - NORMAN ALAN B [US], et al
- [X] WO 8400478 A1 19840216 - PHILIP MORRIS INC [US]
- [A] GB 1604257 A 19811209 - HAUNI WERKE KOERBER & CO KG
- [A] US 4340074 A 19820720 - TUDOR THOMAS T
- See also references of WO 2015145747A1

Cited by

CN109527648A; CN109527647A; WO2024016455A1

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