

Title (en)

METHOD FOR PRODUCING FILTER CIGARETTE, FILTER, AND FILTER CIGARETTE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER FILTERZIGARETTE, FILTER UND FILTERZIGARETTE

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE CIGARETTE À FILTRE, FILTRE, ET CIGARETTE À FILTRE

Publication

EP 2893820 A4 20160601 (EN)

Application

EP 12888733 A 20121126

Priority

JP 2012080465 W 20121126

Abstract (en)

[origin: EP2893820A1] A filter cigarette producing method includes a core forming fiber processing step of adding a plasticizer to core forming fibers (4) having a total fineness of 23000 denier to 70000 denier so as to attain an additive rate of 13% to 40%; a sheath forming fiber processing step of adding a plasticizer to sheath forming fibers (5) having a total fineness of 10000 denier to 47000 denier so as to attain an additive rate of 15% or less, or adding no plasticizer to the sheath forming fibers so as to attain an additive rate of 0%; a hollow filter forming step of forming a hollow filter (11) subsequent to the core forming fiber processing step and the sheath forming fiber processing step in such a manner that the core forming fibers (4) are hardened into a core (11a) including a hole (10) extending from one end surface toward the other end surface, and an outside of the core (11a) is covered with the sheath forming fibers (5) so as to form a sheath (11b), thereby forming the hollow filter (11); and a post-treatment step of conveying the hollow filter (11) through a narrower section that is smaller than a diameter of the hollow filter (11), and greater than a diameter of the core (11a) subsequent to the hollow filter forming step.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [A] JP H04352862 A 19921207 - NIPPON FILTER KOGYO KK
- [A] WO 2009087042 A1 20090716 - BRITISH AMERICAN TOBACCO CO [GB], et al
- [A] FR 2236544 A1 19750207 - REYNOLDS TOBACCO CO R [US]
- See references of WO 2014080516A1

Cited by

CN104824841A; IT201600075162A1; RU2771603C2; CN108430240A; RU2718887C2; CN113795161A; US2022183347A1; CN110545680A; RU2760355C2; US11737490B2; US11559078B2; RU2730481C2; WO2017114871A1; WO2019106038A1; US11058141B2; US11877593B2; WO2018229087A1; WO2020183161A1; US11744962B2; WO2021123819A1; WO2023226522A1; EP3716795B1

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