

Title (en)
POLYMERIC YARN, COMPOSITION AND METHOD

Title (de)
POLYMERGARN, ZUSAMMENSETZUNG UND VERFAHREN

Title (fr)
FIL POLYMÈRE, COMPOSITION ET PROCÉDÉ

Publication
EP 3954812 A1 20220216 (EN)

Application
EP 20202333 A 20201016

Priority
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Abstract (en)
A polymeric yarn composition having antimicrobial and/or antibacterial properties includes: (i) an herbal masterbatch in a range of 0.01%w/w to 10%w/w, and (ii) a base polymer in a range of 90%w/w to 99.99%w/w. The base polymer includes one of polybutylene terephthalate (PBT) or polyethylene terephthalate (PET), or polyamides, or polypropylene. Further, the herbal masterbatch includes: (a) an herbal component includes Neem or Turmeric or combination thereof in a range of 1%w/w to 75%w/w, and (b) a carrier polymer in a range of 25%w/w to 99%w/w. The carrier polymer may be the same as the base polymer and includes one of: PBT, PET, polyamides or polypropylene. To make a polymeric yarn, the herbal masterbatch and the base polymer are melted and extruded together to obtain the polymeric yarn having the herbal component in a range of 0.01% to 10% in weight of the polymeric yarn.

IPC 8 full level
D01F 1/10 (2006.01)

CPC (source: CN EP US)
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Citation (search report)

- [I] EP 3342902 A1 20180704 - AYM SYNTEX LTD [IN], et al
- [XI] CN 109183176 A 20190111 - ZHONGRUN SCIENCE & TECH CO LTD
- [A] US 2013034620 A1 20130207 - YOO IN-SIK [KR], et al

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Designated extension state (EPC)
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EP 3954812 A1 20220216; AU 2021201250 A1 20220303; AU 2021326058 A1 20230302; CA 3187842 A1 20220217; CN 112796013 A 20210514; EP 4196628 A1 20230621; JP 2022032928 A 20220225; US 2023313419 A1 20231005; WO 2022034490 A1 20220217

DOCDB simple family (application)
EP 20202333 A 20201016; AU 2021201250 A 20210225; AU 2021326058 A 20210810; CA 3187842 A 20210810; CN 202110128616 A 20210129; EP 21755585 A 20210810; IB 2021057357 W 20210810; JP 2021011525 A 20210127; US 202118018892 A 20210810