

Title (en)

TEMPERATURE ADAPTABLE TEXTILE FIBERS AND METHOD OF PREPARING SAME

Title (de)

TEMPERATURANPASSUNGSFÄHIGE TEXTILFASERN UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

FIBRES TEXTILES POUVANT S'ADAPTER A LA TEMPERATURE ET PROCEDE POUR LES PREPARER

Publication

EP 1368517 A4 20070926 (EN)

Application

EP 01274730 A 20011019

Priority

- US 0127776 W 20011019
- US 69116400 A 20001019

Abstract (en)

[origin: WO03062513A2] A fiber is provided having enhanced thermal storage and release characteristics. The fiber includes a mixture of a first polymer and a thermal stabilizing material surrounded by a second polymer which forms a sheath for the fiber. The thermal stabilizing material may be at least one phase change and/or plastic crystalline material. The first polymer acts as a carrier for the thermal stabilizing material during formation of the fiber, and both the first and second polymers effectively enclose the thermal stabilizing material within the fiber thereby preventing its leakage. The fiber may be of the sheath-core or "island-in-the-sea" type, and fabrics manufactured from such fibers exhibit enhanced insulating properties at desired temperature ranges. Methods for manufacturing the fiber as well as fabrics formed from various types of fibers are also disclosed.

IPC 8 full level

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CPC (source: EP KR US)

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D04H 1/435 (2013.01 - EP); **D04H 1/43828** (2020.05 - EP US); **D04H 1/4383** (2020.05 - EP US); **D04H 3/16** (2013.01 - EP)

Citation (search report)

- [E] WO 0224992 A1 20020328 - OUTLAST TECHNOLOGIES INC [US]
- [X] DATABASE WPI Week 199706, Derwent World Patents Index; AN 1997-062307, XP002447089
- See references of WO 03062513A2

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