

Title (en)

THIN FILM THERMOELECTRIC DEVICES FOR POWER CONVERSION AND COOLING

Title (de)

THERMOELEKTRISCHE DÜNNFILMBAUELEMENTE FÜR DIE STROMWANDLUNG UND KÜHLUNG

Title (fr)

DISPOSITIFS THERMOELECTRIQUES A FILM MINCE DESTINES A LA CONVERSION DE PUISSANCE ET AU REFROIDISSEMENT

Publication

EP 1756881 A4 20110309 (EN)

Application

EP 04821305 A 20041213

Priority

- US 2004041431 W 20041213
- US 52847903 P 20031211

Abstract (en)

[origin: WO2005074463A2] A thermoelectric device having at least one thermoelectric unit including at least one thermoelectric pair of n-type and p-type thermoelements, a first header coupled to one side of the thermoelectric pair, and a second header coupled to a second side of the thermoelectric pair. The thermoelectric pair has a thermal conduction channel area smaller than an area of the first header or the second header such that the thermal conduction area is a fraction of the area of the first header or the second header.

IPC 8 full level

F25B 21/02 (2006.01); **H10N 10/10** (2023.01); **H10N 10/13** (2023.01); **H10N 10/17** (2023.01); **H10N 10/81** (2023.01); **H10N 10/851** (2023.01)

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C-Set (source: EP)

H01L 2924/0002 + H01L 2924/00

Citation (search report)

- [XAY] US 6388185 B1 20020514 - FLEURIAL JEAN-PIERRE [US], et al
- [Y] US 5237821 A 19930824 - OKUMURA TAKUJI [JP], et al
- [Y] GB 989370 A 19650414 - PHILIPS ELECTRONIC ASSOCIATED
- [Y] US 4687879 A 19870818 - HENDRICKS TERRY J [US]
- [Y] US 2002062648 A1 20020530 - GHOSHAL UTTAM SHYAMALINDU [US]
- [A] US 4640977 A 19870203 - SHAKUN WALLACE [US]
- [A] JP H08316532 A 19961129 - HITACHI CHEMICAL CO LTD

Designated contracting state (EPC)

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DOCDB simple family (application)

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