

Title (en)
THERMOELECTRIC ELEMENTS, METHOD FOR THE PRODUCTION THEREOF, AND USE THEREOF

Title (de)
THERMOELEKTRISCHE ELEMENTE, VERFAHREN ZU DEREN HERSTELLUNG UND DEREN VERWENDUNG

Title (fr)
ÉLÉMENTS THERMOÉLECTRIQUES, PROCÉDÉS DE FABRICATION ET UTILISATION

Publication
EP 2089917 A2 20090819 (DE)

Application
EP 07803245 A 20070905

Priority
• EP 2007059282 W 20070905
• DE 102006055120 A 20061121
• US 86676506 P 20061121

Abstract (en)
[origin: WO2008061823A2] Disclosed are thermoelectric elements that are produced using a porous matrix or a porous substrate. The matrix is made of an electrically insulating material that has sufficient thermal and chemical resistance and the lowest possible thermal conductivity. The matrix is provided with different thermoelectric materials in predetermined areas such that continuous conductors are formed within the matrix. Said continuous conductors are electrically interconnected so as to form thermal couples which are electrically interconnected so as to form the thermoelectric element. The production method is inexpensive and very flexible, allowing thermoelectric elements to be produced for many different applications.

IPC 8 full level
H01L 35/32 (2006.01); **H01L 35/34** (2006.01)

CPC (source: EP US)
H10N 10/01 (2023.02 - EP US); **H10N 10/17** (2023.02 - EP US); **Y10T 156/10** (2015.01 - EP US); **Y10T 156/1052** (2015.01 - EP US)

Citation (search report)
See references of WO 2008061823A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008061823 A2 20080529; WO 2008061823 A3 20081106; CN 101542763 A 20090923; CN 101542763 B 20110518;
DE 102006055120 A1 20080529; DE 102006055120 B4 20151001; EP 2089917 A2 20090819; JP 2010510682 A 20100402;
JP 5290187 B2 20130918; TW 200832769 A 20080801; US 2008121263 A1 20080529; US 8378206 B2 20130219

DOCDB simple family (application)
EP 2007059282 W 20070905; CN 200780043181 A 20070905; DE 102006055120 A 20061121; EP 07803245 A 20070905;
JP 2009537572 A 20070905; TW 96133276 A 20070906; US 98470307 A 20071121