

Title (en)  
DOPED TIN TELLURIDES FOR THERMOELECTRIC APPLICATIONS

Title (de)  
DOTIERTE ZINNTELLURIDE FÜR THERMOELEKTRISCHE ANWENDUNGEN

Title (fr)  
TELLURURES DE ZINC DOPÉS POUR APPLICATIONS THERMOÉLECTRIQUES

Publication  
**EP 2250126 A2 20101117 (DE)**

Application  
**EP 09708165 A 20090205**

Priority

- EP 2009051298 W 20090205
- EP 08151149 A 20080207
- EP 09708165 A 20090205

Abstract (en)  
[origin: WO2009098248A2] The p- or n-conductive semiconductor material contains a compound of general formula (I)  $\text{Sn}_a\text{Pb}_{1-a-(x_1+\dots+x_n)}\text{A}_1x_1\dots\text{A}_nx_n(\text{Te}_{1-p-q-r}\text{SepSqXr})_{1+z}$ , in which  $0.05 < a < 1$ ,  $n = 1$ , where n is a number of chemical elements that differ from Sn and Pb, and independently  $1 \text{ ppm} = x_1\dots x_n = 0.05$ , A1... An differ from one another and are selected from the group of elements Li, Na, K, Rb, Cs, Mg, Ca, Y, Ti, Zr, Hf, Nb, Ta, Cr, Mn, Fe, Cu, Ag, Au, Ga, In, Tl, Ge, Sb, Bi X F, Cl, Br or I,  $0 = p = 1$ ,  $0 = q = 1$ ,  $0 = r = 0.01$ ,  $-0.01 = z = 0.01$ , with the proviso that  $p + q + r = 1$  und  $a + x_1 + \dots + x_n = 1$ .

IPC 8 full level  
**C01B 19/00** (2006.01); **H01L 23/38** (2006.01); **H01L 35/16** (2006.01); **H01L 35/34** (2006.01)

CPC (source: EP US)  
**C01B 19/002** (2013.01 - EP US); **C01B 19/007** (2013.01 - EP US); **H01L 23/38** (2013.01 - EP US); **H10N 10/01** (2023.02 - EP US); **H10N 10/852** (2023.02 - EP US); **C01P 2006/40** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - EP US); **Y02P 20/129** (2015.11 - EP US)

Citation (search report)  
See references of WO 2009098248A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**WO 2009098248 A2 20090813**; **WO 2009098248 A3 20100225**; CA 2715040 A1 20090813; CN 101965313 A 20110202; EP 2250126 A2 20101117; JP 2011514666 A 20110506; JP 5468554 B2 20140409; KR 20110004362 A 20110113; RU 2010137002 A 20120320; TW 200950165 A 20091201; US 2011012069 A1 20110120; US 8772622 B2 20140708

DOCDB simple family (application)  
**EP 2009051298 W 20090205**; CA 2715040 A 20090205; CN 200980108084 A 20090205; EP 09708165 A 20090205; JP 2010545461 A 20090205; KR 20107019118 A 20090205; RU 2010137002 A 20090205; TW 98103903 A 20090206; US 86655209 A 20090205