

Title (en)

ELECTRONIC DEVICE GRAPHENE GRID

Title (de)

GRAPHENGITTER FÜR EINE ELEKTRONISCHE VORRICHTUNG

Title (fr)

GRILLE DE GRAPHÈNE POUR DISPOSITIF ÉLECTRONIQUE

Publication

**EP 2797837 A4 20150826 (EN)**

Application

**EP 12861564 A 20121227**

Priority

- US 201161631270 P 20111229
- US 201113374545 A 20111230
- US 201261638986 P 20120426
- US 201213545504 A 20120710
- US 201213587762 A 20120816
- US 201213612129 A 20120912
- US 201213666759 A 20121101
- US 2012071833 W 20121227

Abstract (en)

[origin: WO2013101937A1] A device includes an anode, a cathode, and a grid configured to modulate a flow of electrons from the cathode to anode. The grid is made of graphene material which is substantially transparent to the flow of electrons. In one general aspect, a method for configuring a multi-electrode electronic device (e.g., a microelectronic or nanoelectronic device) includes providing an anode, providing a cathode and providing a grid that is made of graphene material to modulate a flow of electrons from the cathode to anode. The method may include disposing the anode, the cathode and the grid in a vacuum holding container to form the electronic device.

IPC 8 full level

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CPC (source: CN EP)

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Citation (search report)

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- [X] US 2011192976 A1 20110811 - OWN CHRISTOPHER SU-YAN [US], et al
- [I] US 2011226960 A1 20110922 - ZHANG LI-NA [CN], et al
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- See references of WO 2013101937A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**WO 2013101937 A1 20130704**; CN 104024147 A 20140903; CN 104137218 A 20141105; CN 104137218 B 20170308;  
CN 104137254 A 20141105; CN 104137254 B 20170606; CN 104160467 A 20141119; CN 104160467 B 20170308; CN 104769698 A 20150708;  
CN 104769698 B 20170308; EP 2797837 A1 20141105; EP 2797837 A4 20150826; EP 2798673 A1 20141105; EP 2798673 A4 20151118;  
EP 2798673 B1 20190116; EP 2801102 A1 20141112; EP 2801102 A4 20150812; EP 2801102 B1 20180530; IN 5630DEN2014 A 20150403;  
JP 2015510655 A 20150409; JP 6278897 B2 20180214; KR 101988068 B1 20190611; KR 101988069 B1 20190611;  
KR 20140110981 A 20140917; KR 20140116181 A 20141001; KR 20140128975 A 20141106; WO 2013101941 A1 20130704;  
WO 2013101944 A2 20130704; WO 2013101944 A3 20150611; WO 2013101948 A1 20130704; WO 2013101951 A1 20130704

DOCDB simple family (application)

**US 2012071833 W 20121227**; CN 201280065581 A 20121227; CN 201280070838 A 20121227; CN 201280070857 A 20121227;  
CN 201280070914 A 20121227; CN 201280070924 A 20121227; EP 12861564 A 20121227; EP 12863100 A 20121227;  
EP 12863524 A 20121227; IN 5630DEN2014 A 20140708; JP 2014550467 A 20121227; KR 20147021047 A 20121227;  
KR 20147021314 A 20121227; KR 20147021370 A 20121227; US 2012071837 W 20121227; US 2012071841 W 20121227;  
US 2012071845 W 20121227; US 2012071849 W 20121227