

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 201111229
- US 201113374545 A 201111230
- 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  
**B82Y 40/00** (2011.01); **H01J 1/48** (2006.01); **H01J 19/38** (2006.01); **H01J 21/10** (2006.01); **H01J 45/00** (2006.01)

CPC (source: CN EP)  
**H01J 1/48** (2013.01 - CN EP); **H01J 3/021** (2013.01 - CN); **H01J 3/022** (2013.01 - EP); **H01J 19/38** (2013.01 - EP); **H01J 21/105** (2013.01 - EP); **H01J 45/00** (2013.01 - CN EP); **B82Y 30/00** (2013.01 - CN EP); **H01L 2924/0002** (2013.01 - CN EP)

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)  
AL 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 RS SE SI SK SM TR

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