

Title (en)  
GRAPHENE CONTAINING COMPOSITIONS

Title (de)  
GRAPHEN ENTHALTENDE ZUSAMMENSETZUNGEN

Title (fr)  
COMPOSITIONS CONTENANT DU GRAPHÈNE

Publication  
**EP 2780282 A4 20150527 (EN)**

Application  
**EP 12849443 A 20121114**

Priority

- US 201161559715 P 20111114
- US 201261596216 P 20120207
- US 201261596220 P 20120207
- US 201261596224 P 20120208
- US 2012065135 W 20121114

Abstract (en)  
[origin: WO2013074709A1] Compositions comprising graphene sheets, at least one aromatic compound. The compositions may optionally contain a polymer and/or acid catalysts. The may be in the form of inks or coatings. The aromatic compounds used in the present invention comprise at least one aromatic ring. They may comprise two or more aromatic rings. When two or more aromatic rings are present, they may be fused, bonded directly to each other, bonded using a spacer of one or more atoms, etc. The aromatic rings can be all-carbon based or can contain heteroatoms (heteroaromatics). Examples of rings systems the aromatic compounds can be based on (derivatives of) include benzene, naphthalene, anthracene, tetracene, pentacene, phenanthrene, pyrene, pyrene, benzo[a]pyrene, coronene, chrysene, triphenylene, perylene, corannulene, ovalene, acenaphthylene, fluorine, biphenyl, bisphenols, etc. Examples of heteroaromatic ring systems the aromatic compounds can be based on include furan, thiophene, pyrrole, pyridine, indole, imidazole, pynmidine, purine, etc.

IPC 8 full level  
**C01B 31/04** (2006.01); **C08K 3/04** (2006.01); **C08K 5/04** (2006.01); **C08K 7/24** (2006.01); **C09D 5/24** (2006.01); **C09D 7/61** (2018.01); **C09D 7/63** (2018.01); **C09D 11/037** (2014.01); **C09D 11/324** (2014.01); **C09D 11/52** (2014.01)

CPC (source: EP US)  
**C09D 5/24** (2013.01 - EP); **C09D 7/61** (2017.12 - EP US); **C09D 7/63** (2017.12 - EP US); **C09D 7/70** (2017.12 - EP US); **C09D 11/037** (2013.01 - EP US); **C09D 11/324** (2013.01 - EP); **C09D 11/52** (2013.01 - EP); **C09D 129/14** (2013.01 - EP); **C08K 3/042** (2017.04 - EP); **C08K 5/04** (2013.01 - EP)

Citation (search report)

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- [X] TING WU ET AL: "Adsorption characteristics of acrylonitrile, p-toluenesulfonic acid, 1-naphthalenesulfonic acid and methyl blue on graphene in aqueous solutions", CHEMICAL ENGINEERING JOURNAL, ELSEVIER SEQUOIA, LAUSANNE, CH, vol. 173, no. 1, 20 July 2011 (2011-07-20), pages 144 - 149, XP028280626, ISSN: 1385-8947, [retrieved on 20110727], DOI: 10.1016/J.CEJ.2011.07.050
- See references of WO 2013074712A1

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**US 2012065130 W 20121114**; CN 201280066990 A 20121114; CN 201280067001 A 20121114; EP 12849213 A 20121114; EP 12849443 A 20121114; US 2012065131 W 20121114; US 2012065135 W 20121114