Title (en)

PROCESS FOR PRODUCTION OF GRAPHITE FLAKES AND FILMS VIA LOW TEMPERATURE PYROLYSIS

Publication

EP 0477297 A4 19920715 (EN)

Application

EP 90911192 A 19900613

Priority

US 36580189 A 19890614

Abstract (en)

[origin: WO9015776A1] Electrically conductive carbon flakes and films are prepared in high yield by the pyrolysis of cyclic aromatic hydrocarbons, optionally halogenated, in the presence of a dehydrogenating agent at about at least 800 DEG C. Flakes of thicknesses up to 20 mu m and lengths up to 1 cm on a side are metal-like in appearance and have a conductivity of about 200-300 S/cm at room temperature. By heat treatment to 2600 DEG C, graphitic order is improved and the conductivity rises to APPROX 10000-15000 S/cm.

IPC 1-7

C01B 31/04

IPC 8 full level

C01B 31/04 (2006.01); **C04B 35/52** (2006.01); **C08J 7/00** (2006.01); **H01B 1/00** (2006.01); **H01B 1/04** (2006.01); **H01B 1/24** (2006.01)

CPC (source: EP US)

C01B 32/20 (2017.07 - EP US); **C01B 32/205** (2017.07 - EP US); **C04B 35/52** (2013.01 - EP); **H01B 1/04** (2013.01 - EP US); C01P 2004/20 (2013.01 - EP); C01P 2006/40 (2013.01 - EP)

Citation (search report)

- [X] WORLD PATENTS INDEX LATEST Week 8502, Derwent Publications Ltd., London, GB; AN 85-009363 & JP-A-59 207 820 (AGENCY OF IND. SCI. TECH.) 26 November 1984
- [XP] CHEMISTRY OF MATERIALS, VOL. 1, NØ. 5, SEPT/OCT. 1989,American Chemical Society, Washington, US. CHANG, P. H.; LABES, M. M. :"NEW ROUTE TO GRA PHITE FLAKES AND FILMS: PYROLISIS OF AROMATIC AND HETEROAROMATIC COMPOUNDS UNDER DEHYDROGENATION CONDITIONS" ,pages 523-525.
- See references of WO 9015776A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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