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(71) Applicants: **BASF SE** [DE/DE]; Carl Bosch Str. 38, Ludwigshafen, 67056 (DE). **EMPA** [CH/CH]; Überlandstr. 129, CH-8600 Dübendorf (CH). **MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN E.V.** [DE/DE]; Hofgartenstr. 8, 80539 München (DE).

(71) Applicant *(for CY only)*: **BASF SCHWEIZ AG** [CH/CH]; Klybeckstr. 141, CH-4057 Basel (CH).

(71) Applicant *(for MN only)*: **BASF (CHINA) COMPANY LIMITED** [CN/CN]; 300 Jiangxinsha Road, Shanghai, 200137 (CN).

(72) Inventors: **FASEL, Roman**; Scheuchzerstr. 160, CH-8057 Zürich (CH). **RUFFIEUX, Pascal**; Viehweg 14, CH-1737 Plasselb (CH). **MÜLLEN, Klaus**; Geisbergstr. 139, 50939 Köln (DE). **CAI, Jinming**; Schaffhauserstr. 360, CH-8050 Zürich (CH). **FENG, Xinliang**; Thomas-Mann-Str. 11, 55122 Mainz (DE). **BERGER, Reinhard**; Berliner Str. 17, 55131 Mainz (DE).

(74) Agent: **HAGGENMÜLLER, Christian**; Maiwald Patentanwalts GmbH, Elisenhof / Elisenstr. 3, 80335 München (DE).

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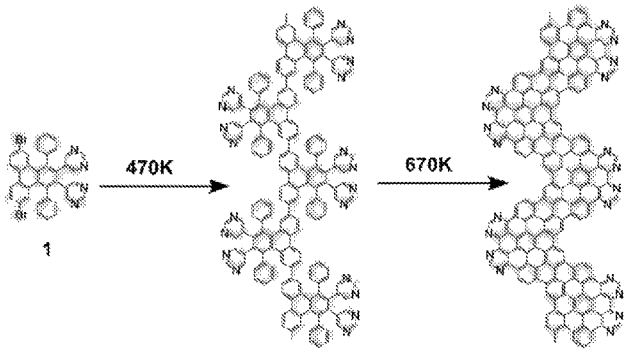


Figure 14

(57) Abstract: The present invention relates to a graphene nanoribbon, comprising a repeating unit which comprises at least one modification,wherein the modification is selected from a heteroatomic substitution, a vacancy, a sp^3 hybridization, a Stone-Wales defect, an inverse Stone-Wales defect, a hexagonal sp^2 hybridized carbon network ring size modification, and any combination thereof.

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