

## Title (en)

ELECTROMAGNETIC INTERFERENCE SHIELDING COMPOSITION, ARTICLE AND METHODS THEREOF

## Title (de)

ELEKTROMAGNETISCHE INTERFERENZABSCHIRMENDE ZUSAMMENSETZUNG, GEGENSTAND UND VERFAHREN DAFÜR

## Title (fr)

COMPOSITION DE PROTECTION CONTRE LES INTERFÉRENCES ÉLECTROMAGNÉTIQUES, ARTICLE ET PROCÉDÉS ASSOCIÉS

## Publication

**EP 4058405 A4 20231129 (EN)**

## Application

**EP 20887102 A 20200103**

## Priority

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## Abstract (en)

[origin: WO2021094836A1] The present disclosure relates to the field of polymer engineering, applied industrial technology and electromagnetic interference (EMI) shielding materials. Particularly, the present disclosure relates to a low-density EMI shielding composition comprising soft elastomer, conductive nanostructure and metal ferrite doped reduced graphene oxide (RGO) and method of preparing the composition. The composition of the present disclosure is useful for manufacturing EMI shielding articles such as coating, adhesive, sheet, absorber, gasket, Microwave Absorbing Material, Radar Absorbing Material, soft electromagnetic interference shielding material, etc. The present disclosure also relates to articles comprising the composition and methods of obtaining the same.

## IPC 8 full level

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## Citation (search report)

- [IY] YADAV RAGHVENDRA SINGH ET AL: "Lightweight NiFe2O4-Reduced Graphene Oxide-Elastomer Nanocomposite flexible sheet for electromagnetic interference shielding application", COMPOSITES PART B, vol. 166, 1 June 2019 (2019-06-01), AMSTERDAM, NL, pages 95 - 111, XP055823689, ISSN: 1359-8368, DOI: 10.1016/j.compositesb.2018.11.069
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- [A] CHEN CHUN-YU ET AL: "Remarkable microwave absorption performance of graphene at a very low loading ratio", COMPOSITES PART B, ELSEVIER, AMSTERDAM, NL, vol. 114, 16 February 2017 (2017-02-16), pages 395 - 403, XP029986059, ISSN: 1359-8368, DOI: 10.1016/J.COMPOSITESB.2017.02.016
- [A] GUPTA SHIVAM ET AL: "Carbon materials and their composites for electromagnetic interference shielding effectiveness in X-band", CARBON, ELSEVIER OXFORD, GB, vol. 152, 3 June 2019 (2019-06-03), pages 159 - 187, XP085769546, ISSN: 0008-6223, [retrieved on 20190603], DOI: 10.1016/J.CARBON.2019.06.002
- See references of WO 2021094836A1

## Designated contracting state (EPC)

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