

Title (en)
ELECTROSPUN NANOFIBROUS POLYMER MEMBRANE FOR USE IN PERSONAL PROTECTIVE EQUIPMENT

Title (de)
ELEKTROGESPONNENE NANOFASERPOLYMERMEMBRAN ZUR VERWENDUNG IN EINER PERSÖNLICHEN SCHUTZAUSRÜSTUNG

Title (fr)
MEMBRANE POLYMÈRE NANOFIBREUSE ÉLECTROFILÉE DESTINÉE À ÊTRE UTILISÉE DANS UN ÉQUIPEMENT DE PROTECTION PERSONNEL

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Application
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Abstract (en)
[origin: WO2021202820A1] An electrospun polymer nanofibrous membrane that provides high filtering efficiency and excellent porosity is disclosed herein. The membrane may be treated with one or more antimicrobial or antiviral agents. The treatment may preferably be a coating of one or more antiviral agents on the surface of the membrane. Alternatively, one or more antiviral agents may be impregnated into the nanofibrous membrane. The membrane may additionally or alternatively be impregnated with one or more metal-organic frameworks (MOFs). The membrane has a high filtering efficiency and sufficient porosity to provide breathability characteristics. The membrane is suitable for use in making facemasks and respirators that are highly resistant to infectious pathogens and/or other small particulates.

IPC 8 full level
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