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(54) **MAGNETIC FIELD ALIGNMENT OF EMULSIONS TO PRODUCE POROUS ARTICLES**

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See application file for complete search history.

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(57) **ABSTRACT**

The use of magnetic fields in the production of porous articles is generally described. Certain embodiments are related to methods of producing porous articles in which magnetic fields are applied to an emulsion to align emulsion droplets. In some embodiments, after the emulsion droplets have been aligned, the emulsion droplets and/or the medium surrounding the emulsion droplets can be removed to leave behind a porous article. According to certain embodiments, polyvinyl alcohol can be used, for example, to stabilize the

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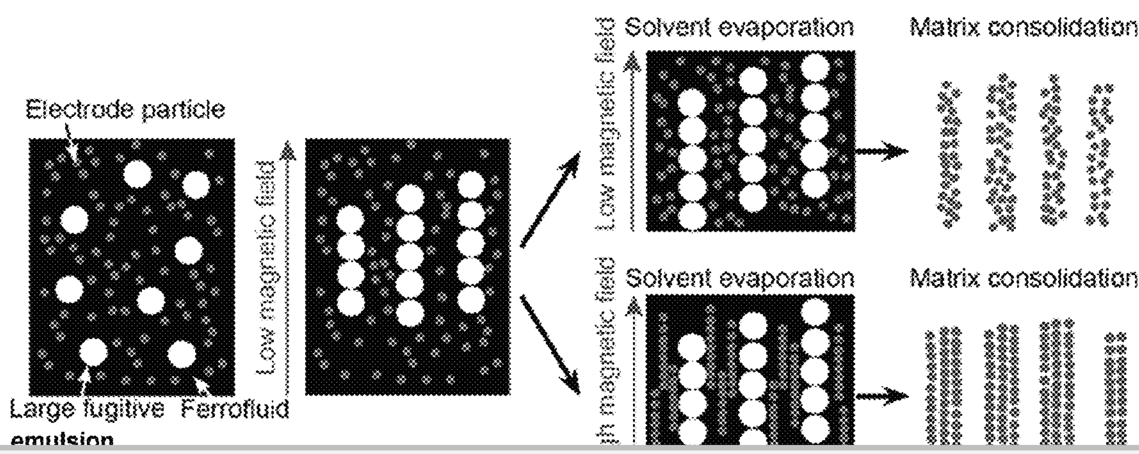

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emulsion droplets and/or bind together components of the porous article. In some embodiments, water-soluble liquid alcohol can be used, for example, to stabilize the suspension of electronically conductive material within a phase of the emulsion.

20 Claims, 18 Drawing Sheets

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