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# Patterned nanoparticle assembly methodology

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(54) **PATTERNED NANOPARTICLE ASSEMBLY METHODOLOGY**

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(58) **Field of Classification Search**

None  
See application file for complete search history.

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(57) **ABSTRACT**

Methods for forming a nanoparticle assembly are generally provided. The method can comprise applying a colloidal fluid to a surface of a magnetic media, wherein the colloidal fluid comprises magnetic nanoparticles, a surfactant, a trigger salt, and a carrier medium; and assembling the magnetic nanoparticles into a pattern through a magnetic force arising from the surface of the magnetic media.

**21 Claims, 10 Drawing Sheets**

