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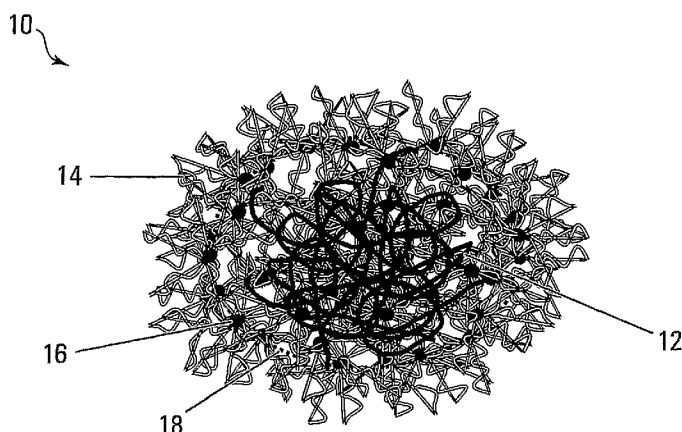
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: WATER-SOLUBLE FLUORESCENT PARTICLE COMPRISING ENTANGLED FLUORESCENT POLYMER AND AMPHIPHILIC MOLECULE



(57) Abstract: Water-soluble fluorescent particles are formed in a simple process. A mixture comprising a solvent, water, a fluorescent polymer dissolved in the solvent, and an amphiphilic molecule is provided. The fluorescent polymer comprises a hydrophobic segment. The amphiphilic molecule comprises hydrophilic and hydrophobic segments. The solvent is removed from the mixture to allow the fluorescent polymer and the amphiphilic molecule to entangle in the presence of water, thus forming the water-soluble fluorescent particles. In the formed particles, the hydrophilic segments of the amphiphilic molecule are entangled with one another, and the hydrophobic segments of the fluorescent polymer and amphiphilic molecule are entangled with one another. The amphiphilic molecule encapsulates the fluorescent polymer and at least some of the hydrophilic segments are exposed to render the particle soluble in water.

WO 2007/027159 A1



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
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