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(54) Title: LIGHT GOLD

(57) Abstract: The present invention relates to novel composite materials comprising elemental gold in the form of single crystals, amyloid fibrils and a polymer. This composite material is similar to glassy plastics yet lighter than aluminum and has a golden shining similar to 18K gold. Due to its unique properties, this composite is termed "light gold". This composite material suits, for example, watches, jewelry, radiation shielding, catalysis and electronics. The invention further provides for environmentally friendly methods to manufacture such composite materials.



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