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(54) Title: CURABLE COMPOSITION AND ARTICLE POSSESSING PROTECTIVE LAYER OBTAINED THEREFROM

(57) Abstract: A curable composition contains: a) functionalized colloidal silica obtained from the reaction of surface hydroxyl groups of colloidal silica with at least one functionalizing silane of the general formula: (R1XSi(ORV)_n wherein each R1 is, independently, a monovalent alkyl, cycloalkyl, aryl, alkaryl or aralkyl group of up to 18 carbon atoms, optionally possessing at least one chemically reactive functionality selected from the group consisting of alkenyl, acrylate and epoxy; b) at least one first curable monomer possessing at least one of alkenyl and acrylate functionality; c) at least one second curable monomer possessing epoxy functionality; d) at least one third curable monomer possessing at least one of alkenyl and acrylate functionality together with epoxy functionality, the third curable monomer replacing or supplementing the first and/or second curable monomer, provided, that when the third curable monomer replaces both the first and second curable monomers, the functionalized colloidal silica possesses at least one of alkenyl and acrylate functionality together with epoxy functionality; and, optionally, e) at least one curing agent for the curable monomer(s). The composition when cured exhibits scratch and abrasion resistant properties making it particularly well-suited for use as a coating for many different kinds of substrates, e.g., DVD discs and especially the more recent Blu-ray Discs, where these properties are highly desirable or even necessary.

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