

Title (en)
NANOPARTICLE CONTAINING, PIGMENTED INKS

Title (de)
NANOPARTIKELHALTIGE, PIGMENTIERTE TINTEN

Title (fr)
ENCRES PIGMENTEES CONTENANT DES NANOParticules

Publication
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Application
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Priority
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Abstract (en)
[origin: WO2006130144A1] There is provided a new composition, printed fabrics and method for improving color strength and crock fastness on printed or coated polymeric, silk and cotton fabrics. The novel printing composition is an aqueous mixture having silica nanoparticles and silane coupling agents in addition to pigments and a relatively small amount of binder. The nanoparticles and coupling agent are preferably in a ratio of from about 1:3 to 3:1. The binder may be present in an amount between about 0.1 and 10 weight percent. A number of other optional ingredients like humectants, dispersants, biocides and the like may be present. Also provided is a method of making the printed fabric including the steps of mixing nanoparticles and coupling agent, adding water, pigment and binder and milling the mixture to a particle size between about 150 and 200 nm, applying the composition and drying the printed fabric.

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