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(54) Title: CONDUCTIVE INKS

(57) Abstract: A conductive ink substantially free of frit and photovoltaic cells having conductive gridlines formed from a conductive ink substantially free of glass frit are described. Conductive inks according to embodiments of the present invention are adapted to adhere to the surface of a substrate and, upon firing, form a solid metal oxide phase and cause a conductive species to form an electrical conductor on the substrate. In further embodiments, the conductive ink is capable of penetrating anti-reflection coatings disposed on surfaces of substrates. In accordance with one or more embodiments, the conductive inks include a plurality of metallo-organic components which form a solid metal oxide phase upon firing and a conductive species. In other embodiments, the conductive inks include a plurality of precursors, including one or more precursors which form conductive elements upon firing or heating.



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