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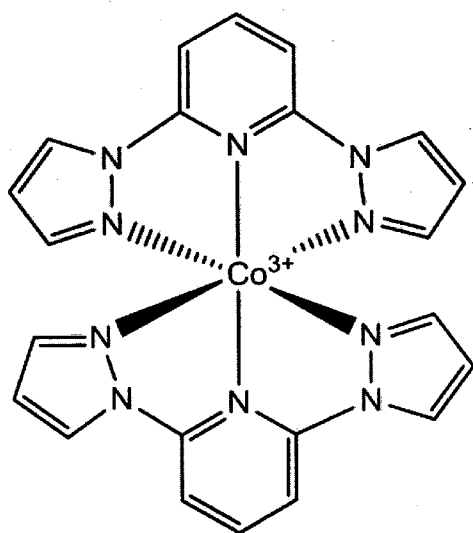


Fig. 3

(57) Abstract: The present invention provides a new complex of formula (I) that is useful as p-dopant. The new complex is a complex of Co^{3+} , Ni^{3+} , Cr^{3+} , Mn^{3+} or Fe^{3+} , and contains new bi- or tridentate ligands. The invention also relates to the use of the new complex as p-dopant in hole-transporting-material (HTM). The invention further relates to HTM p-doped with the complex of the invention. The invention further relates to photo-electrochemical device such as solar cell, in particular solid state dye sensitized solar cells (ssDSCs) that comprise the complex of the invention.