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SOME NEW CHARACTERIZATIONS OF PARTIAL ISOMETRIES IN RINGS WITH INVOLUTION

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ABSTRACT. In this paper, some characterizations of partial isometries, normal elements and strongly EP elements are given by the construction of EP elements. At the same time, the partial isometry elements are characterized by the existence of solutions of equations in rings in a given set, and also by the general form of solutions of given equations.

Mathematics Subject Classification (2020): 15A09; 16U99; 16W10 Keywords: group inverse, MP-invertible element, partial isometry element, *EP* element, strongly *EP* element, normal element

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