

EMBEDDING OF WEAKLY RICKART *-RING

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Abstract

S. K. Berberian raised the open problem “ Can every Weakly Rickart *-ring be embedded in Rickart *-ring? With preservation of RP's?” N.K. Thakare and B. N. Waphare gave a partial solution : A weakly Rickart *-ring A can be embedded in Rickart *-ring provided there exists a ring K such that:

- (i) K is an integral domain with involution,
- (ii) A is a *-algebra over K ,
- (iii) For any $\lambda \in K - \{0\}$ there exists a projection $e_\lambda, e_\lambda \in A$ such that $x \in A, \lambda x = 0 \Rightarrow LP(x) \leq e_\lambda$. In this paper a more general partial solution of the problem is obtained. More precisely in the above partial solution the integral domain K is replaced by arbitrary commutative ring with identity.

Key Words : *Involution, Rickart *-ring, Weakly Rickart *-ring.*

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