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Olivier A. Heubo-Kwegna*, 7400 Bay Road, University Center, MI 48710, and **Bruce Olberding** and **Andreas Reinhart**. *Group-Theoretic and Topological Invariants for Completely Integrally Closed Prüfer Domains*.

We consider the lattice-ordered groups $\text{Inv}(\mathbb{R})$ and $\text{Div}(\mathbb{R})$ of invertible and divisorial fractional ideals of a completely integrally closed Prüfer domain. We prove that $\text{Div}(\mathbb{R})$ is the completion of the group $\text{Inv}(\mathbb{R})$. Among the class of completely integrally closed Prüfer domains, we focus on the one-dimensional Prüfer domains. This class includes Dedekind domains, the latter being the one-dimensional Prüfer domains whose maximal ideals are finitely generated. However, numerous interesting examples show that the class of one-dimensional Prüfer domains includes domains that differ quite significantly from Dedekind domains by a number of measures, both group-theoretic (involving $\text{Inv}(\mathbb{R})$ and $\text{Div}(\mathbb{R})$) and topological (involving the maximal spectrum of \mathbb{R}). We examine these invariants in connection with the class of SP-domains, those domains for which every proper ideal is a product of radical ideals. For this last class of domains, we show that if in addition the ring has nonzero Jacobson radical, then the lattice-ordered groups $\text{Inv}(\mathbb{R})$ and $\text{Div}(\mathbb{R})$ are determined entirely by the topology of the maximal spectrum of \mathbb{R} . (Received December 19, 2016)