Dense and closed subsets of compact-like topological spaces

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We investigate dense and closed subsets of compact-like topological spaces (see diagram below). We describes properties which are preserved by products with ω-bounded topological spaces. We give canonical constructions of closed embedding of a topological space into countably pracompact and H-closed topological spaces. Our results imply a positive answer on the question of Banakh, Dimitrova and Gutik about a closed embedding of the bicyclic monoid into pseudocompact topological semigroups. Also we prove that each Hausdorff topological space can be embedded as a closed subspace into a H-closed topological space.