1014-54-548 **Robert Raphael**, Montreal, Quebec Canada, and **R. Grant Woods***
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Manitoba R3T 2N2, Canada. *Hewitt realcompactifications and P-coreflections.*

For a Tychonoff space X , let uX denote its Hewitt realcompactification and bX denote its P-space coreflection. It is known that b(uX) is a realcompact space containing bX as a dense subspace. If bX is C-embedded in b(uX), then b(uX) = u(bX) (up to equivalence if extensions). We call such a space X a bu-good space.

We investigate the preservation of the property of being bu-good under formation of subspaces and products. Let H(X) denote the epimorphic hull of C(X) and let G(X) denote the smallest von Neumann regular subring of F(X) (the ring of all real-valued functions with domain X) that contains C(X). We relate the equality b(uX) = u(bX) to the question of when G(X) and/or H(X) is ring-isomorphic to a ring of functions of the form C(Y). These latter results extend results obtained in earlier work by the authors and M. Henriksen. (Received September 20, 2005)