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Nic Koban* (`nicholas.koban@maine.edu`), 228 Main Street, Farmington, ME 04938, and **Peter Wong**. *The Ω -invariant of a semi-direct product of groups*. Preliminary report.

Suppose $G \cong H \rtimes K$ where H and K are finitely generated groups. We will describe the Ω^1 invariant of G in terms of $\Omega^1(H)$, $\Omega^1(K)$, and the action of K on H . This invariant Ω^1 is analogous to the Bieri-Neumann-Strebel invariant Σ^1 which replaces the notion of half-spaces in the definition of Σ^1 with the notion of truncated cones. (Received September 20, 2011)