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Kristofer D. Jorgenson* (kjorge@worldnet.att.net), 1309 Marshall St. #401, Redwood City, CA 94063. A note on a class of rings found as Ga-invariants for locally trivial actions on normal affine varieties.

This paper concerns the type of ring that can be realized as a ring of invariants for a locally trivial additive group (or Ga-)action on a normal, affine variety. Results involving ideal-transforms and a counterexample to the Problem of Zariski are utilized to achieve an example of a locally trivial action on a normal, affine variety of dimension 4 that has a nonfinitely generated ring of invariants. This would also yield yet another example of Ga-action on an affine variety that can be written locally as a translation but does not admit an equivariant trivialization. (Received August 28, 2000)