

**Kim, Goansu**

*On polygonal products of finitely generated abelian groups.* (English)

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Polygonal products of groups and their residual properties are considered. Let  $H$  be a subgroup of a group  $G$ . Then  $G$  is said to be  $H$ -separable if, for each  $x \in G \setminus H$ , there exists  $N \triangleleft_f G$  such that  $x \notin NH$ . A group  $G$  is subgroup separable if  $G$  is  $H$ -separable for all f.g. subgroups  $H$  of  $G$ . A group  $G$  is  $\pi_c$  if  $G$  is  $\langle x \rangle$ -separable for all  $x \in G$ . It is proved that a polygonal product of polycyclic-by-finite groups amalgamating subgroups, with trivial intersections, is  $\pi_c$  if the amalgamated subgroups are contained in the centres of the vertex groups containing them. Unlike this result, most polygonal products of four f.g. abelian groups, with trivial intersections, are not subgroup separable.

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