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Eric M Freden* (freden@suu.edu), Dept of Mathematics, SUU, Cedar City, UT 84720, and
Jennifer L Schofield (js@suumail.net). *The growth series for*
 $H_n = \langle b, s, t \mid sbs^{-1} = b^n = tbt^{-1} \rangle$. Preliminary report.

Higman demonstrated a family of non-hopfian groups which are isomorphic to the amalgam of a solvable Baumslag-Solitar group with itself. We explicitly compute the growth functions for these groups H_n when n is an odd integer. Each function is algebraic but not rational. The construction uses the treelike geometry of the Cayley graph and ideas from formal language theory. (Received February 14, 2006)