1067-00-1330 Quan T Tran* (qtran@ou.edu), 3831 NW 10, Oklahoma City, OK 73107. Snowflake Groups with Super-Exponential 2-Dimensional Dehn Functions.

In their paper Super-Exponential 2-Dimensional Dehn Functions, J. Barnard, N. Brady and P. Dani produced groups of type \mathcal{F}_3 with 2-dimensional Dehn functions $\delta^2(x) = exp^m(x)$, where m is a natural number. And N. Brady, M. Bridson, M. Forester and K. Shankar produced in their paper Snowflake Groups, Perron-Frobenius Eigenvalues, and Isoperimetric Spectra groups of type \mathcal{F}_{n+1} whose n-dimensional Dehn functions are $\delta^n(x) = x^s$ for any $s \in \mathbb{Q} \cap [2, \infty)$. We will combine these two ideas to produce groups of type \mathcal{F}_3 whose 2-dimensional Dehn functions are $\delta^2(x) = exp^m(x^s)$. (Received September 20, 2010)