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B Winn* (brian.winn@math.tamu.edu), Department of Mathematics, Texas A&M University, College Station, TX 77843. *Wave-functions of Šeba billiards.*

We consider the Schrödinger equation on a rectangular domain with a delta potential concentrated at a single point—the so-called Šeba billiard. We investigate the behaviour of the eigenstates at large energies. We find, under suitable assumptions, that there are subsequences of states that are localised in position representation. (Received September 26, 2006)