Claims

1. A gun barrel for guiding a bullet along a longitudinal axis, the bullet having a diameter, the gun barrel comprising: (a) a circumferential series of lands, each land among the circumferential series of lands being radially displaced from the longitudinal axis a distance at least as great as one-half of the bullet's diameter, said each land extending helically about the longitudinal axis; (b) a plurality of sound reflection chambers, each sound reflection chamber among the plurality of sound reflection chambers being positioned between an adjacent pair of lands among the circumferential series of lands, said each chamber opening radially inwardly and having a muzzle end; (c) a plurality of ceilings, each ceiling having a muzzle end, said each ceiling overlying one of the sound reflection chambers; and (d) a plurality of sound reflection walls having radially outer ends, each wall among the plurality of sound reflection walls closing one of the sound reflection chambers' muzzle ends, the radially outer end of said each wall being fixedly attached to the muzzle end of one of the ceilings, wherein each said sound reflection wall is configured to block sound waves from exiting through the muzzle ends of each of the sound reflection chambers.

2. The gun barrel of Claim 1 wherein each sound reflection chamber has a radial height at least as great as one-half of the bullet's diameter.

3. The gun barrel of Claim 2 wherein each land among the circumferential series of lands has circumferential and oppositely circumferential ends, wherein each sound reflection chamber among the plurality of sound reflection chambers has circumferential and oppositely circumferential walls, wherein each wall among the sound reflection chambers' circumferential walls extends radially from one of the lands' oppositely circumferential ends, and wherein each wall among the sound reflection chambers' oppositely circumferential walls extends radially from one of the lands' circumferential ends.

4. The gun barrel of Claim 3 wherein each wall among the sound reflection chambers' circumferential and oppositely circumferential walls extends helically about the longitudinal axis.

5. The gun barrel of Claim 4 wherein each land among the circumferential series of lands has a helical pitch, and further comprising rifling extending along the longitudinal axis, the rifling having a helical pitch, said each land's helical pitch being substantially equal to the rifling's helical pitch.

6. The gun barrel of Claim 5 wherein each land among the circumferential series of lands is concave.

7. The gun barrel of Claim 5 further comprising muzzle and breach segments, the circumferential series of lands and the plurality of sound reflection chambers being positioned at the muzzle segment and the rifling being positioned at the breach segment.

8. The gun barrel of Claim 7 further comprising means for fixedly interconnecting the muzzle and breach segments.

9. The gun barrel of Claim 8 wherein the fixed interconnecting means comprise a joint selected from the group consisting of helically threaded joints and wholly formed joints.