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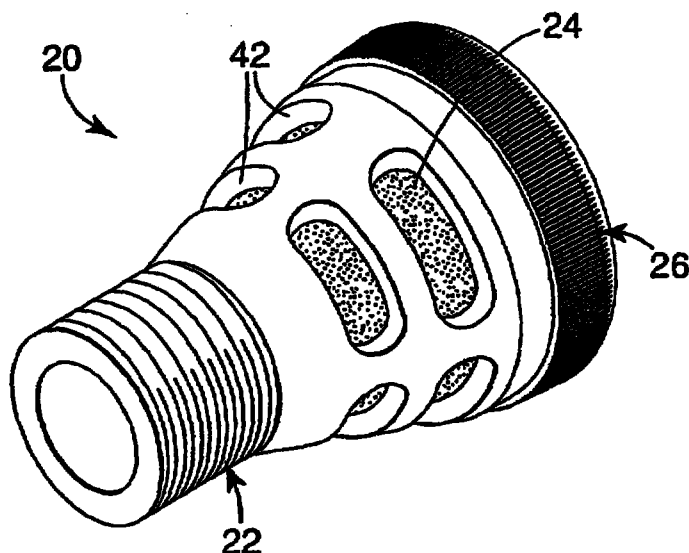
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(54) Title: MUFFLER WITH ACOUSTIC BARRIER MATERIAL FOR LIMITED CLEARANCE PNEUMATIC DEVICE APPLICATIONS



(57) Abstract: A muffler for attenuating noise produced by a pneumatic device having limited clearance. The muffler includes a housing and an acoustic barrier material. The housing includes an inlet and an outlet. In one preferred embodiment, at least a portion of the housing is frusto-conical such that the outlet has a width greater than a diameter of the inlet. Further, the housing preferably has a maximum width less than approximately 1.5 inches (38 mm). The acoustic barrier material is disposed within the housing and forms a plurality of microbubbles. Further, the acoustic barrier material is configured to conform to a shape of the housing. The muffler can be utilized with a pneumatic valve having limited space available for receiving the muffler, providing significant noise reduction with minimal back pressure.

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