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(54) **ACOUSTIC COVER FOR VEHICLE FUEL INJECTION PUMP**

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(57) **ABSTRACT**

A high-pressure fuel injection pump, including a sound-damping acoustic cover, is mounted on an engine and is part of a direct-inject fuel system for a vehicle. In an exemplary embodiment, the acoustic cover includes a top portion that fits over the fuel injection pump and a side portion that mechanically engages the fuel injection pump, and at least one of the top or side portions is formed from a sound-damping metal laminate material. Sound and/or vibrations that emanate from the fuel injection pump may be transferred to the acoustic cover and converted into thermal energy by the sound-damping metal laminate material.

19 Claims, 2 Drawing Sheets