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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2005/0077665 A1**
(43) **Pub. Date: Apr. 14, 2005**(54) **COMPOSITE LEAF SPRING GEOMETRY
WITH AN INTERLOCKING INTERFACE****Publication Classification**(51) **Int. Cl.⁷** **B60G 11/02**(52) **U.S. Cl.** **267/229**(76) **Inventors:** **David K. Platner**, Shelby, MI (US);
Ramin Rezakhanlou, Murcia (ES);
James Trotter, Auburn Hills, MI (US)(57) **ABSTRACT**

Correspondence Address:
CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009 (US)

A suspension system includes a composite leaf spring having a mounting segment of a tapered width combined with an expanding depth. Any position along the longitudinal length of the mounting segment provides a singular cross-sectional shape taken parallel to an axle beam. An axle beam attachment system defines a cavity having a shape equivalent to the leaf spring at the predetermined location for mechanically interlocking the axle beam attachment system with the leaf spring at that predetermined location.

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