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(54) **Title**: FOOTWEAR ASSEMBLY WITH INTEGRAL FOOTBED SUSPENSION SYSTEM

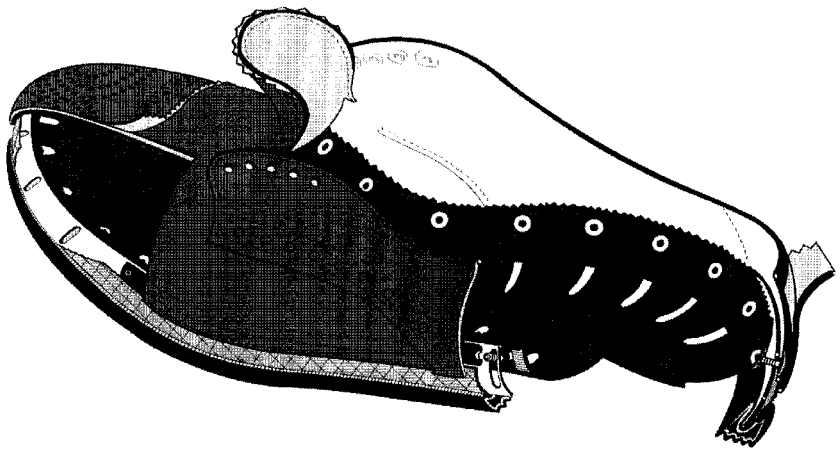


FIG. 1

(57) **Abstract**: A footwear assembly with integral footbed suspension system is disclosed. A shoe comprises a sole, a blade extending away from the sole, an Energy Return System (ERS) connected to the blade, an upper, and a cradle coupled to the upper and coupled to the ERS via a plurality of ties, wherein the ERS is intermediate the cradle and the blade. The ERS is configured to resiliently deform under pressure from the foot while the foot is substantially suspended via the cradle relative to the sole. A plurality of sensors are configured to detect relative movement between components of the shoe and to transmit data to a chip positioned in the shoe. The data can be used for gait and performance analysis.

WO 2009/132465 A1