Device for measuring body part movements and stretch

Value Proposition/USP
Musculoskeletal disorders cost society approximately 36 billion annually and is a major cause of early retirement. The device is a new clinical diagnostics- and monitoring-equipment, that enables measuring the effect of therapy (e.g. custom orthotics), minimizing human factor and ensuring an accurate diagnosis of fault position. A low cost solution with potential in the clinical-, sports-, and customer-specific shoes realm.

Business Opportunity/Objective/Commercial Perspectives
As a diagnostic tool the device can assist the clinician in assessing the accurate position of the foot for diagnostic purposes. Shoe specialists can ensure that a customer receives the best insole for the purpose, both in professional and commercial use. In sports the device can be used to optimize movement patterns during training and help with footwear selection.

Technology Description/Technology Summary
The device consists of a controller box connected to a stretch sensors, collecting data on body part movements. The controller has integrated gyroscope and accelerometer and stores sensor profiles and enable logging of data on SD card and direct transfer to PC. The sensor is built on 3 siliconcoded layers, making it resistant to perspirations. The device enables quantifying body part movement and stretch, resistance of the sensor indicate a complete linear function of the change in length of the sensor and thereby movement of the foot. The system has software to calibrate and visualize the movement of the foot.

Development Phase/Current State
We have extensive clinical validation of a prototype and need to develop a commercial and clinical friendly product adapted to several applications. We are looking for investors as well as a commercial partner to set up a company to exploit the technology potential.

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