

The Office of Technology Management

UNIVERSITY OF TEXAS  ARLINGTON

Tech ID: UTA 13-27

Bubble Actuated Ergonomic Products

INVENTOR: Muthu Wijesundara, PhD.

TECHNOLOGY NEED

Increasing amounts of Americans spend greater than six hours a day seated, whether at work or at home. This time spent sitting is slowly killing us. Many of the detrimental health effects come from poor posture. Studies have revealed that poor posture is correlated with depression, obesity, and increased stress. Current office furniture is designed to encourage proper posture but it requires that users sit in a single position to reap the benefits of its design, which is hard to maintain because of pressure points that develop between the user and the chair.

INVENTION DESCRIPTION/SOLUTION

Researchers at UTA have developed a bubble actuated cushion system that uses sensors to manage pressure and shape of the surface that would interact with the user. The system works automatically and while in use. This would encourage and aid the user of ergonomic office furniture in maintaining posture by preventing pressure points from developing and increase blood flow in the areas of the body in contact with the cushion. The cushion's dynamic surface is made up of a series of fluid filled bubbles whose pressure is individually monitored and controlled.

APPLICATIONS

- Office Furniture
- House Furniture
- Pillows and Mattress

KEY BENEFITS

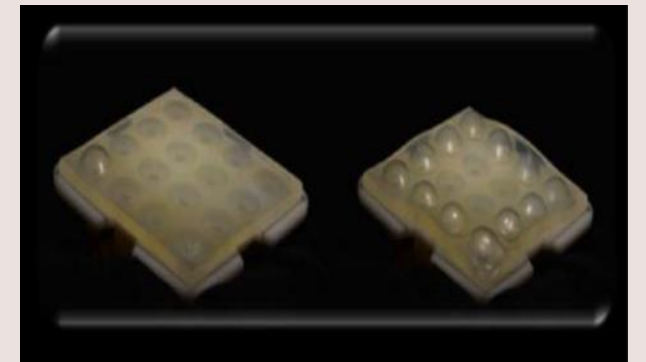
- Bubble actuated cushion system
- Manages pressure points to maintain mental and physical health of user
- Increases user productivity

STAGE OF DEVELOPMENT

- Prototyped and Tested

INTELLECTUAL PROPERTY STATUS

- US patent Application [US20160331556A1](#)



More about the Inventor:
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