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(54) **DETECTOR CONSTRUCTED FROM FABRIC**

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(57) **ABSTRACT**

A position detector produces an output in response to a mechanical interaction. It includes a first electrically conductive fabric plane having electrically conductive elements incorporated therein and at least two electrical connections attached thereto. A second electrically conductive fabric plane is displaced from the first electrically conductive plane and has electrically conductive elements incorporated therein and at least two electrical connections attached thereto. An insulating fabric layer is disposed between the first conductive plane and the second conductive plane and is configured to enable electrical conduction between the first electrically conductive plane and the second electrically conductive plane at the position of a mechanical interaction. A mechanical interaction causes the first electrically conductive plane to be displaced towards the second electrically conductive plane. A voltage is applied to the first electrically conductive fabric plane to determine the position of the mechanical interaction and the resistance of the insulating fabric layer between said first and second electrically conductive planes at the position of a mechanical interaction varies depending on the area of the mechanical interaction applied.

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