a potential is applied across at least one of said planes to determine the position of said mechanical interaction.

**21**. A detector according to claim 20, wherein at least one of said conducting planes is unique to a region and the co-operating conducting plane is shared with a plurality of regions.

**22**. A detector according to claim 21, wherein a single co-operating conducting plane is shared with all of said regions.

**23**. A detector according to claim 20, wherein signals are derived independently from a plurality of regions by a time division multiplexing operation.

**24**. A detector according to claims **20**, wherein a second electrical property is determined to identify additional properties of said mechanical interactions.

**25**. A method of constructing a detector from fabric having electrically conductive elements and configured to produce electrical outputs in response to mechanical interactions, said detector being configured such that a potential is applied across at least one of said planes to determine the position of the mechanical interaction, said method comprising the steps of dividing the detector into a plurality of regions;

providing a first conductive plane and a second conductive plane for each of said regions;

bringing together conductive planes of at least one of said regions in a response to a mechanical interaction.

**26**. A fabric constructed from electrically conducting fibres and from electrically insulating fibres by a mechanical process, wherein electrical connection means are connected to electrically conducting fibres of said fabric during said mechanical process.

**27**. A fabric according to claim 26, wherein said mechanical process is a knitting operation or a weaving operation.

**28**. A fabric according to claim 26, wherein said connector is an insulation displacement connector.

**29**. A fabric according to claim 26, wherein said connectors are enclosed within conducting epoxy resin, ink or silicone.

**30**. A method of constructing a fabric from electrically conducting fibres and from electrically insulating fibres by a mechanical process, comprising the steps of

providing a supply of electrical connection devices for electrical connection to electrically conducting fibres of said fabric;

modifying the mechanical process at selected positions so as to incorporate the electrically conducting device as part of the fabric; and

applying sealing means to said electrically conducting device so as to secure said devices to the machined fabric.

**31**. A detector constructed from fabric having electrically conductive elements to define at least two electrically conducting planes and configured to produce an electrical output in response to a mechanical interaction, wherein

a potential is applied across at least one of said planes to determine the position of a mechanical interaction and said second electrical property is determined to identify additional properties of said mechanical interactions; and

a conductivity non-uniformity is included in at least one of said planes so as to modify an electrical response to a mechanical interaction.

**32**. A detector according to claim 31, wherein said conductivity non-uniformity includes a co-operating pair of conducting strips configured to generate a substantially linear electric field within said conducting planes.

**33**. A detector according to claim 32, wherein said strips are applied to each of said conducting planes at mutually orthogonal locations.

**34**. A detector according to claim 31, wherein all edges of a conducting plane are modified.

**35**. A detector according to claim 31, wherein said conductivity non-uniformity is defined by adjusting the density of conducting threads.

**36**. A detector according to claim 31, wherein said conductivity non-uniformity is created by printing conductive materials onto the detector.

**37**. A method of constructing a detector from fabric configured to produce an electrical output in response to mechanical interactions said detector being configured such that a potential is applied across at least one of said planes to determine the position of a mechanical interaction and a second electrical property is determined to identify additional properties of said mechanical interactions, said method comprising the steps of defining at least two electrically conducting planes from electrically conductive elements and introducing a conductivity non-uniformity in at least one of said planes so as to modify an electrical response to a mechanical interaction.

**38**. A detector constructed from fabric having electrically conductive elements to define at least two electrically conductive planes and configured to produce an electrical output in response to a mechanical interaction, wherein

a second electrically conductive plane of said detector has at least one electrical characteristic that differs significantly in value from the value of said characteristic of the first plane.

**39**. A detector according to claim 38, wherein one of said planes is used as a detector and voltages are applied sequentially in different directions to the other co-operating plane.

**40**. A detector according to claim 38, wherein said electrical characteristic is electrical resistance.

**41**. A position detector according to claim 38, wherein a second electrical property is determined to identify additional properties of said mechanical interactions.

**42**. A detector according to claim 38, configured to measure current or resistance at said second electrical property and configured to determine applied force, applied pressure, area of contact or orientation of an object as the additional property of said mechanical interactions.

**43**. A method of constructing a detector, comprising the steps of

constructing electrically conductive elements from fabric to define at least two electrically conducting planes configured to produce electrical output in response to a mechanical interaction; and

configuring a second electrically conductive plane of said detector with at least one electrical characteristic that differs significantly in value from the value of said characteristic of said first plane.

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