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(54) Title of the Invention: **Positional detection system**
Abstract Title: **An electromagnetic sports position detection system**

(57) A sports positional detection system, comprising: at least two elements which each have an electromagnetically interactive surface, machine-to-machine communication system that is collectively arranged such that if any two or more elements interact, their electromagnetic properties can be detected thus allowing the position of the interacting elements to be communicated to an output means. The elements may be an electrically conductive or electrically charged ball. At least one of the elements may be stationary and one element capable of movement. The system may be applied to at least one stationary element, which may be a playing surface, lines defining the boundaries, or a set of goalposts; and at least one moving element, which could be a ball, footwear, or the participants themselves.

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