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Morita et al.

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(54) **NON-CONTACT TYPE POWER FEEDER SYSTEM FOR MOBILE OBJECT AND PROTECTING APPARATUS THEREOF**

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H01M 10/46   (2006.01)
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(58) **Field of Classification Search** 320/107, 320/108, 109; 310/12.01, 12.02, 12.09; 104/282, 104/292; 290/16, 50
See application file for complete search history.

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(57)   **ABSTRACT**

A noncontact type power feeder system for feeding a power to a mobile object, in which a power feeding portion and a power receiving portion can be easily manufactured at low costs and which can transmit a high power. The noncontact type power feeder system for a mobile object, comprises a power feeding portion provided in a surface on which the mobile object runs, and a power receiving portion provided in the lower part of the mobile object at a position facing to the power supply portion, the each of the power feeding portion and the power receiving portion is composed of windings formed in an oval shape, and a magnetic planar core formed therein with a recess in which the windings are accommodated so that the longitudinal direction of the oval shape of the windings is extended along the travel direction of the mobile object, the planer core is composed of several planar blocks each having a rectangular surface, several blocks being laid so that long sides of the rectangular surfaces are extended in the travel direction of the mobile object, in which several blocks are also laid in the direction orthogonal to the travel direction, and several blocks being superposed one upon another, the recess of the planar core is defined by thick wall parts in which the planar cores are superposed on the surface of the planar core, outside and inside of the oval shape part of the windings.
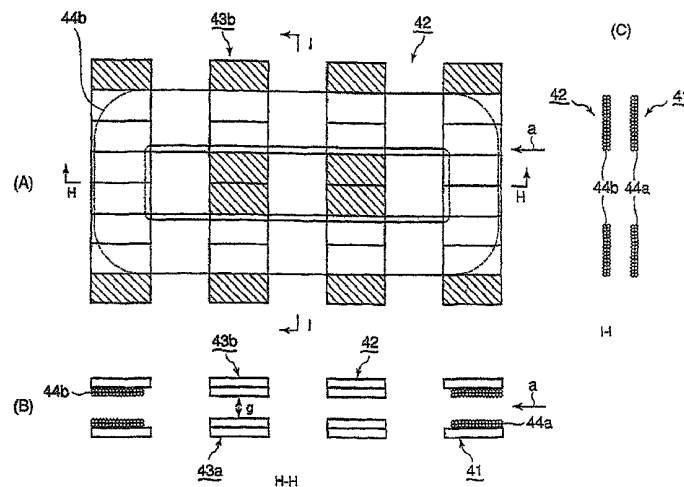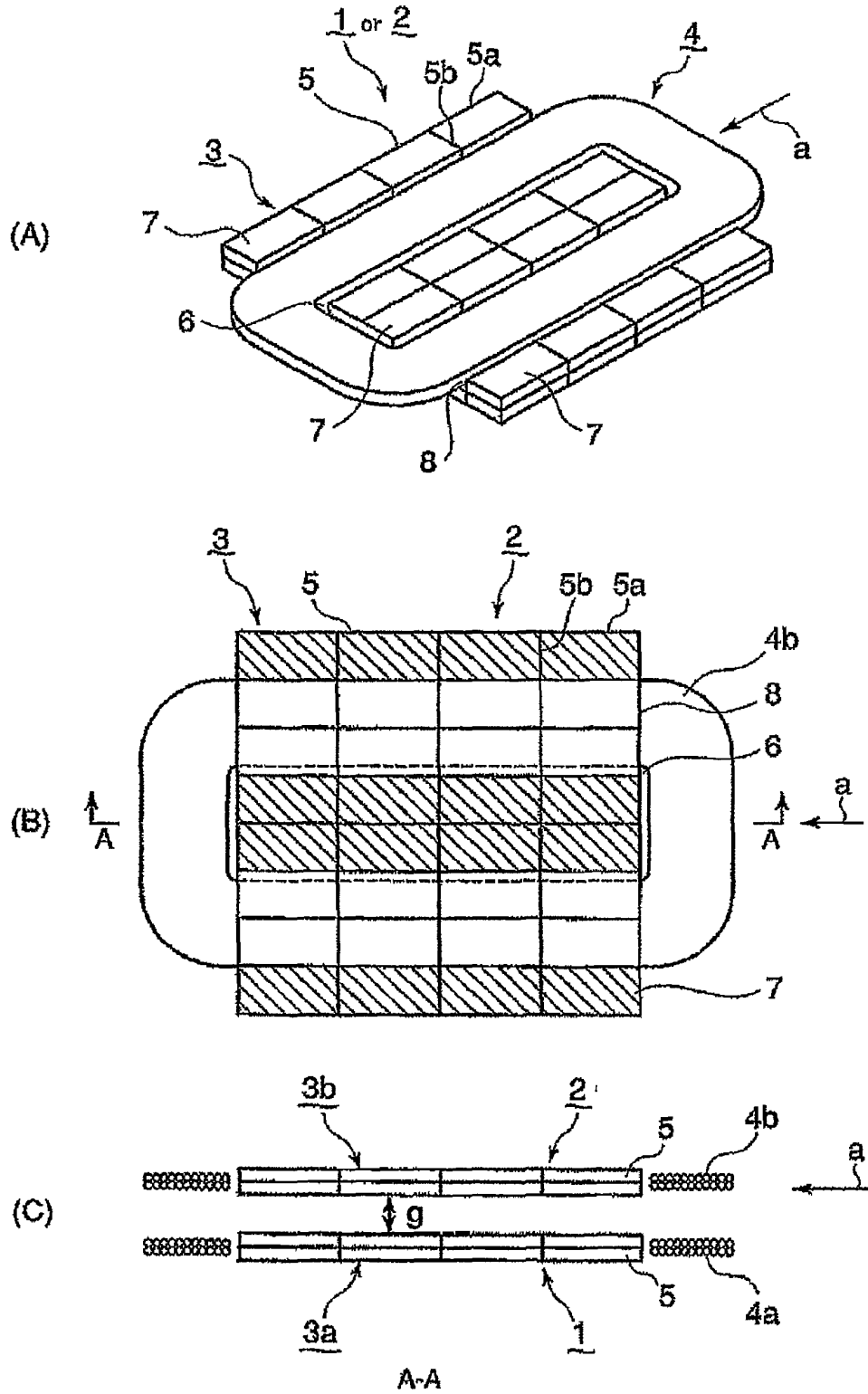
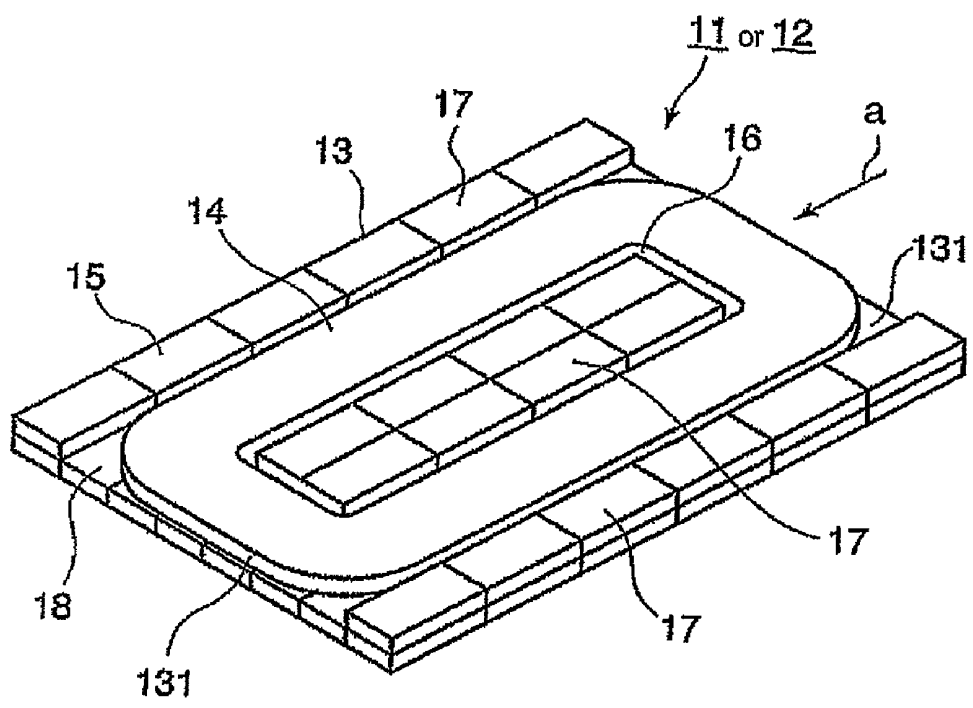**9 Claims, 12 Drawing Sheets**

Fig.1

(A)
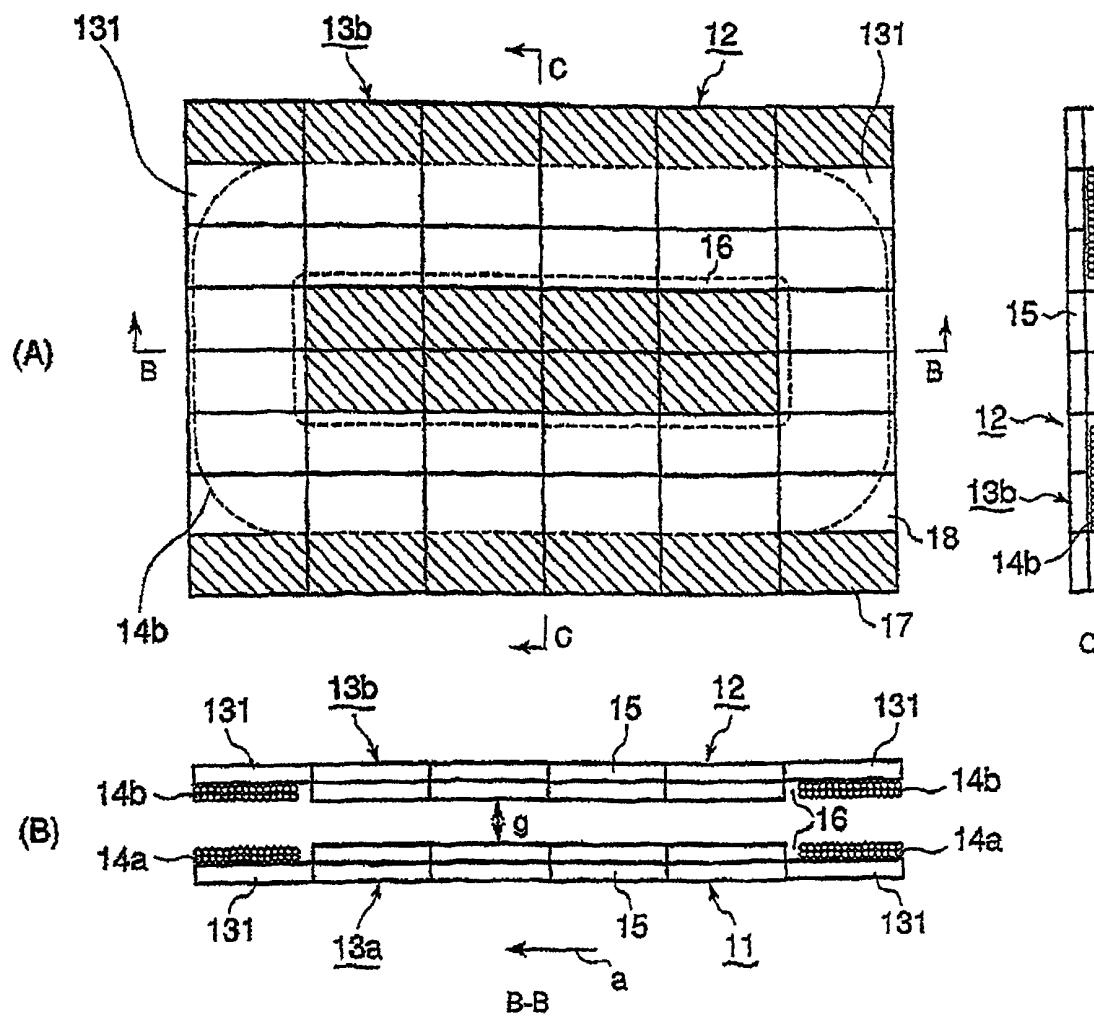

(B)

(C)

A-A

Fig.2

Fig.3

Fig.4

DOCKET ALARM
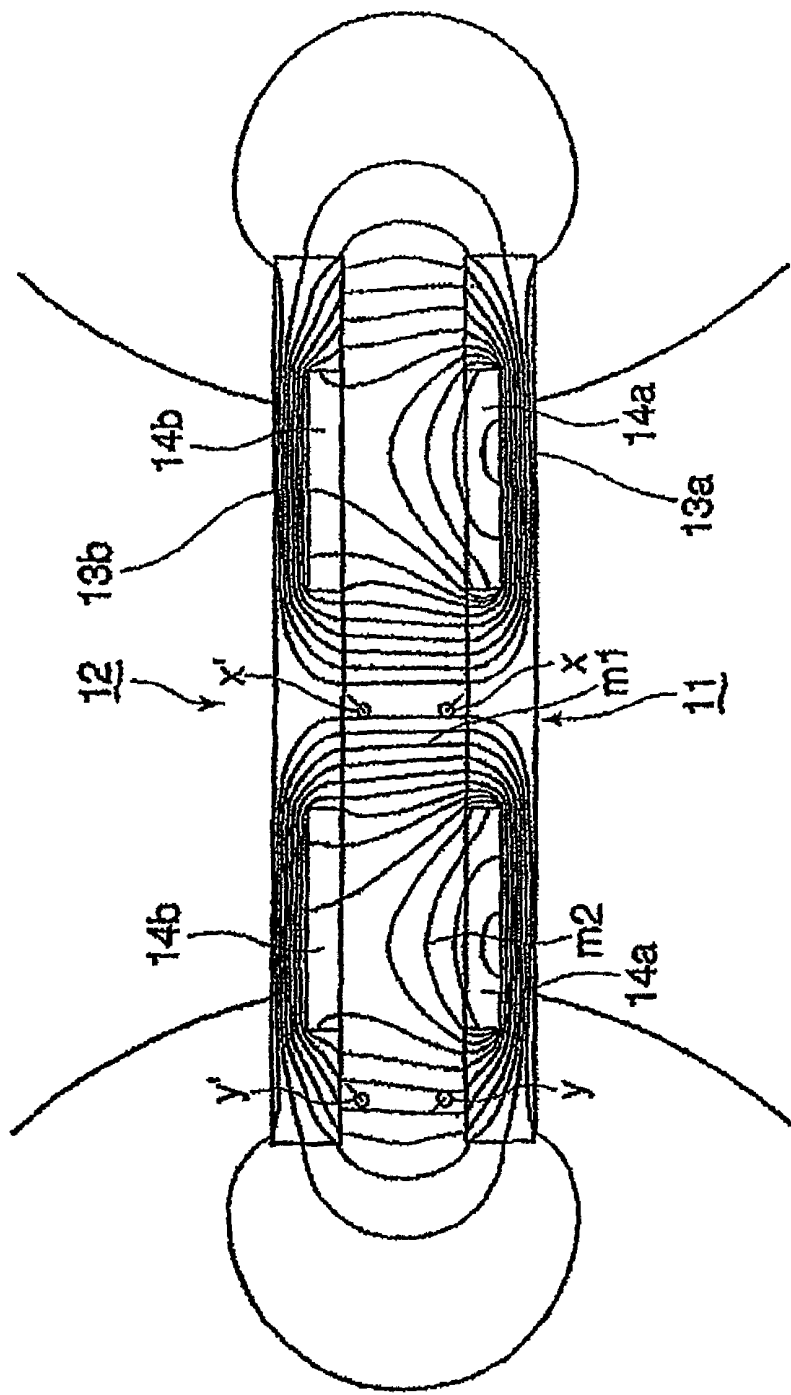
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