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(54) MOULDED MAT

(76) Inventor: Brie Elizabeth McNab, Merrylands (AU)

Correspondence Address:
MICHAEL MOLINS
MOLINS & CO.
SUITE S, LEVEL 6
139 MACQUARIE ST
SYDNEY NSW 2000 (AU)

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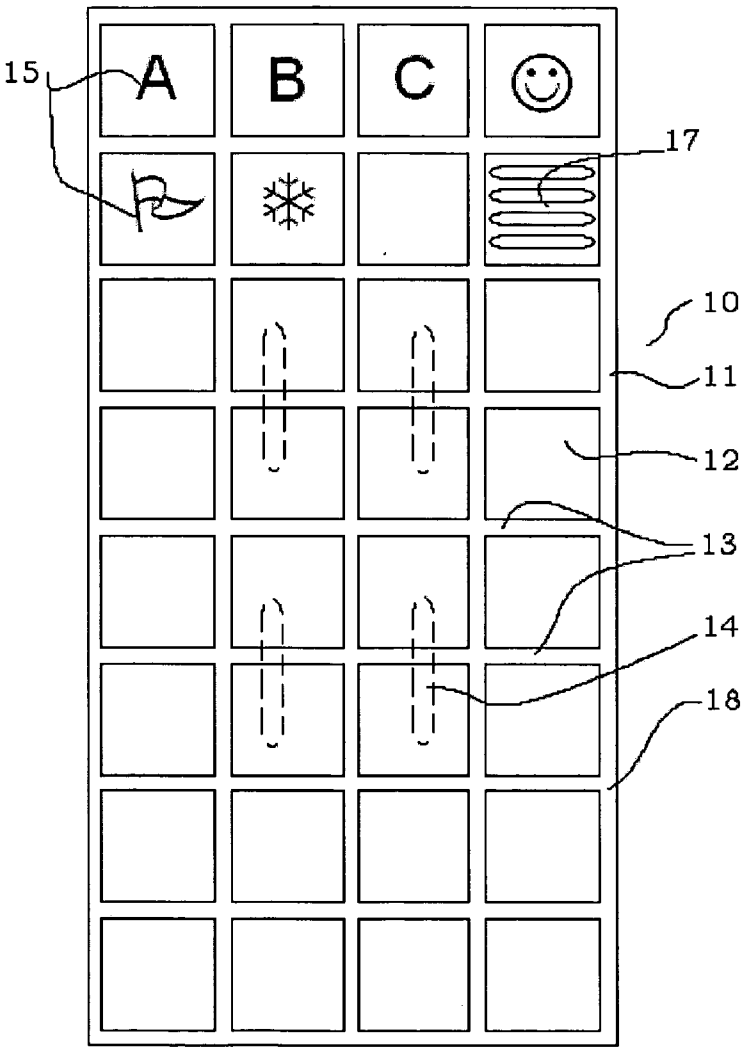
(57) ABSTRACT

A floor mat is provided with three dimensional features. The features co-operate with a baby's stroller. When a stroller is moved over the mat, the stroller's wheels roll over the features and create movements and vibration in the stroller that simulate stroller movement or walking etc. Reciprocating movement of a stroller back and forth over a mat made in accordance with the teachings of the present invention promotes a restful state or sleep in a baby.



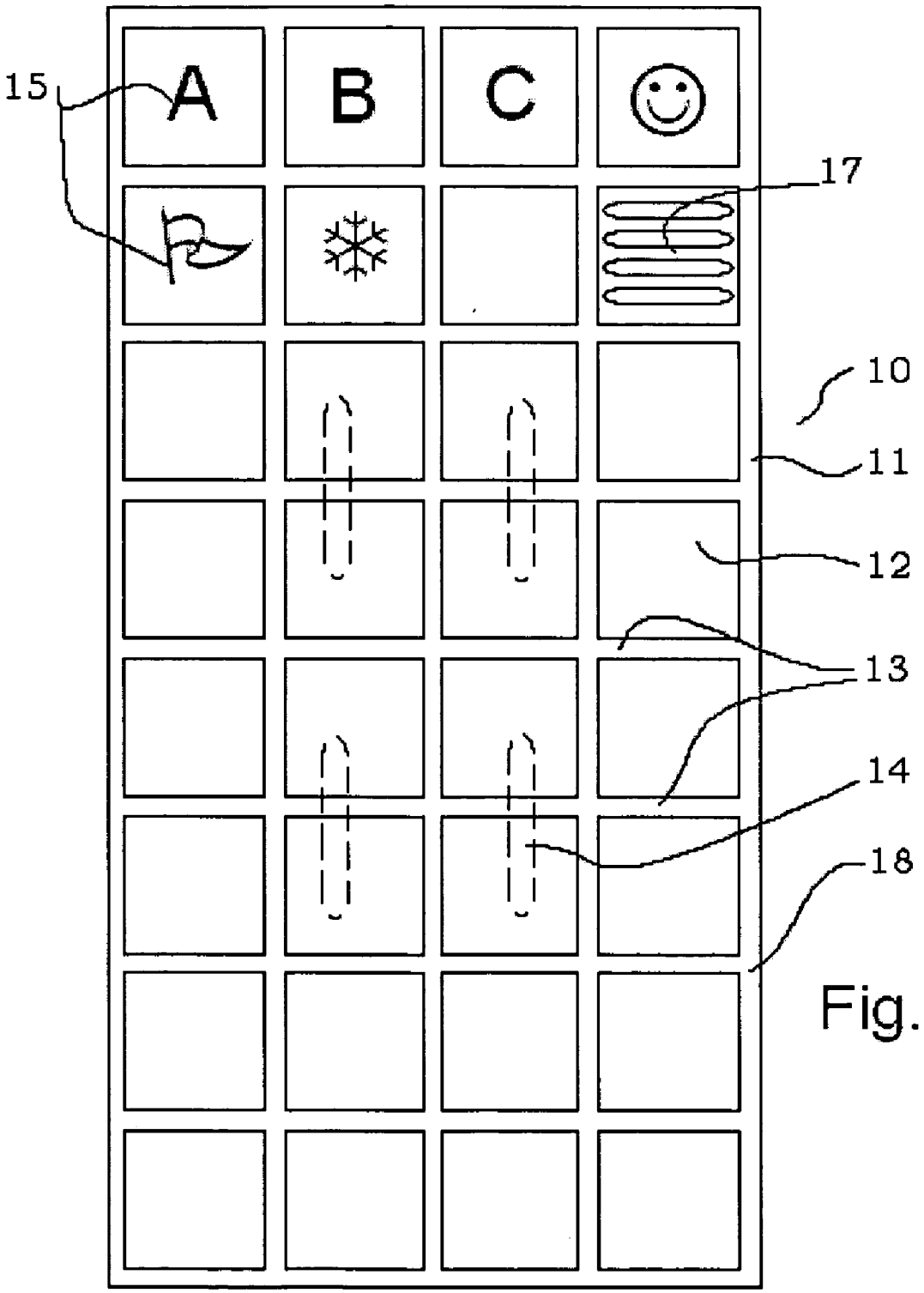


Fig. 1

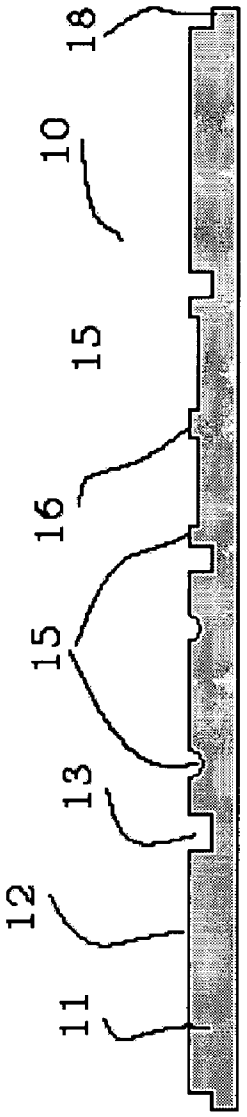


Fig. 2

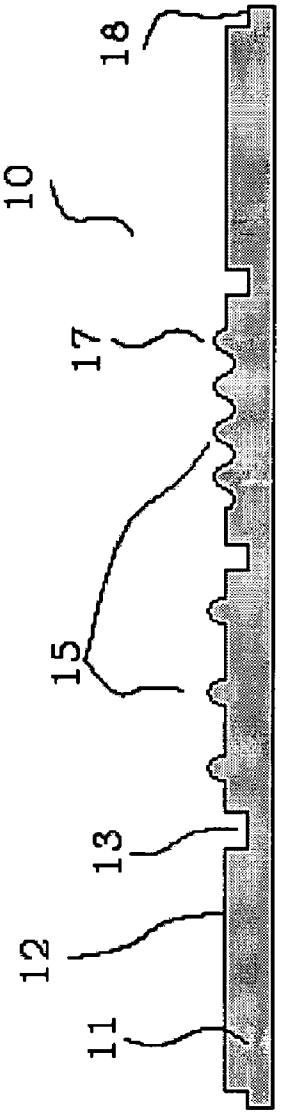


Fig. 3

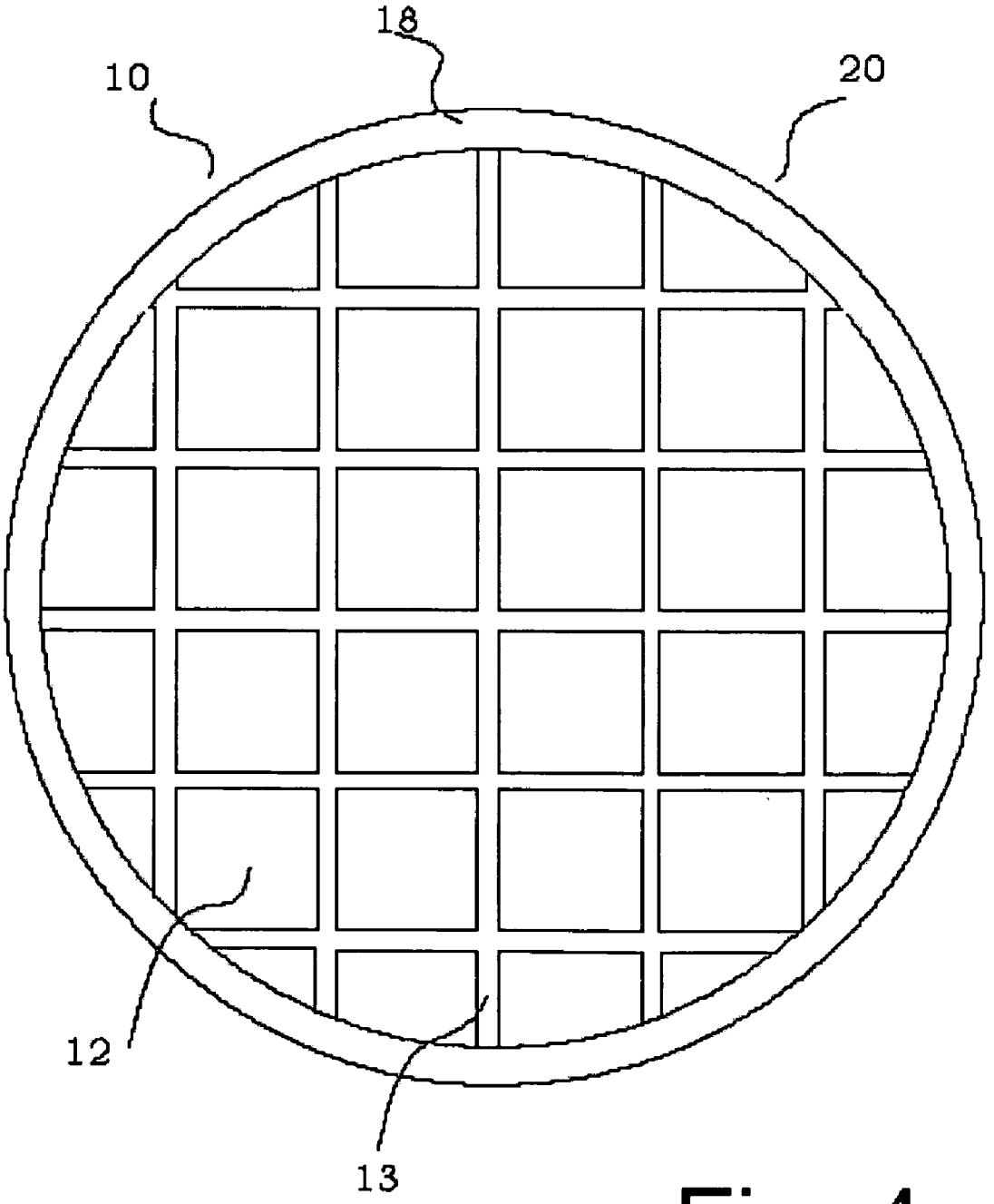


Fig. 4

MOULDED MAT

FIELD OF THE INVENTION

[0001] The invention pertains to floor mats and more particular to a floor mat with three dimensional features which is particular adapted to work in conjunction with a baby stroller to create oscillations or vibrations which are conducive to the baby's rest.

BACKGROUND OF THE INVENTION

[0002] It is a well known phenomenon that certain forms of movement induce a restful state in a baby. Restfulness and sleep can sometimes be induced by walking with a baby, strolling with a baby or by taking a baby for a journey in a car. However, there are times when it is not practical or convenient for the baby or the baby's carer to be mobile. For example, inclement weather may make walking, strolling or a car trip impractical. In other instances, a carer may have other responsibilities or activities which limit the carer's and the baby's mobility.

OBJECTS AND SUMMARY OF THE INVENTION

[0003] Accordingly, it is an object of the invention to provide a floor mat with three dimensional features. The features co-operate with a baby's stroller. When the stroller is moved over the mat, the stroller's wheels pass over the features and create movements and vibration which simulate stroller movement or walking etc. Movement of a stroller back and forth over a mat made in accordance with the teachings of the present invention promotes a restful state or sleep in a baby.

[0004] In preferred embodiments of the invention, the mat is soft enough to be used as a play mat.

[0005] In other embodiments of the invention, sub-features are moulded into the mat or painted onto the mat which may have educational value or entertainment value to an infant or toddler.

[0006] Accordingly, there is provided a floor mat comprising a moulded rubber substrate. The substrate comprises a top surface having three dimensional features. The features are formed into a pattern which is conducive to baby rest.

[0007] In preferred embodiments of the invention, the mat is fabricated from a compound made from recycled rubber tires.

[0008] In other embodiments of the invention, the features comprise a pattern or array.

[0009] In other embodiments of the invention, the array comprises raised areas into which are formed sub-features.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

[0010] **FIG. 1** is a plan view of a floor mat made in accordance with the teachings of the present invention;

[0011] **FIG. 2** is a cross-sectional view of the mat depicted in **FIG. 1**;

[0012] **FIG. 3** is an alternate cross-section of the mat depicted in **FIG. 1**; and

[0013] **FIG. 4** is another embodiment of the invention in plan view.

BEST MODE AND OTHER EMBODIMENTS OF THE INVENTION

[0014] As shown in **FIG. 1**, a floor mat lo comprises a soft substrate **11** which is preferably long enough and wide enough to accommodate the back and forth movement of a conventional stroller on wheels. In the example of **FIG. 1**, the substrate **11** has a top surface which is subdivided into rows and columns of equally spaced raised squares **12**. The squares are preferably separated from one another by regular gaps **13**. The mat **10** can be placed on a floor and the wheels **14** of a stroller can rest on the mat **10**.

[0015] Thus, the mat **10** protects the floor from the wheels **14** of the stroller. Further, the substrate **11** provides an area where the stroller can be moved forward and backward (reciprocated) by a seated or standing person. As the wheels **14** pass or roll over the various squares **12** and gaps **13**, the stroller will be oscillated and vibrated.

[0016] In some embodiments of the invention, each of the raised surface areas (e.g. the squares **12**) includes a moulded-in sub-feature **15**.

[0017] As shown in **FIG. 2**, the sub-feature **15** may be formed in positive or negative relief with respect to the top surface **16** of the area **12**. In preferred embodiments, positive or negative printing techniques create a visual contrast between the feature **15** and the remainder of the area **12**. As suggested by **FIGS. 1 and 2**, particularly apt sub-features include letters of the alphabet or simple symbols which would be understood by toddlers and young children. The sub-features **15** also contribute to the pattern of vibrations induced by the substrate in the stroller wheels **14**.

[0018] As shown in **FIG. 3**, all or some of the areas **12** can be formed with sub-features **15** which further comprise repetitive patterns which are adapted to induce specific kinds of vibrations. In preferred embodiments the regularly occurring sub-features **17** have a regular spacing which is shorter than the spacing between adjacent gaps **13**.

[0019] In some embodiments the substrate **11** further comprises a border area **18** which is lower than the raised areas **12**.

[0020] As shown in **FIG. 4**, the mat **10** need not be square. In this example, a round mat **20** in illustrated. Likewise, it will be appreciated that the areas **12** form a regular array in this example. The areas **12** need not be provided in a regular array need not be square and the gaps **13** need not be uniform in width or depth.

[0021] From the above description, it will be appreciated that the molded rubber mat of the present invention provides a convenient and durable floor covering which is well adapted to protect a floor or other surface from the action of stroller wheels. Further, it is tough, water proof and soft enough to be well adapted for baby and toddler play. The mat is easily cleaned and can be hosed down if required. In this way, the mat serves a purpose while the baby is in a stroller but may also be used in later phases of infancy to the point where the sub-features **15** may serve educational or entertainment purposes.

[0022] The mat of the present invention simulates the motions, rhythms and vibrations associated with walking, strolling and car trips (together referred to as "stroller translation"). In particular, the mat provides the advantages of each, without the requirement for actual mobility. As such, the product is well adapted to use in and around homes, day care centres, hospitals, waiting rooms or other locations where actual mobility is undesirable, inconvenient or impossible.

[0023] In preferred examples of the mat, the gaps between the primary features are 13-18 mm wide and about 1-5 mm deep. The features, when they are square are about 100-200 mm along the sides, preferably about 150 mm. The shapes moulded into the features have a width or "line" width of about 8-10 mm and are 1-5 mm deep.

[0024] While the present invention has been described with reference to particular details of construction, these should be understood as having been provided by way of example and not as limitations to the scope of spirit of the invention.

What is claimed is:

1. A floor mat comprising:

a unitary mouled polymer structure having a substrate onto which is formed a pattern or array of raised three dimensional features;

the features further comprising features that are separated by gaps.

2. The mat of claim 1, wherein:

the array comprises rows and columns of equally spaced, raised squares.

3. The mat of claim 2, wherein: the array is adapted to co-operate with a baby's stroller so that when the stroller is moved over the mat so the stroller's wheels rotate over the array, vibrations are caused that simulate stroller translation.

4. The mat of claim 3, wherein: the polymer is soft enough to be used as a play mat.

5. The mat of claim 3, wherein: the features have shapes moulded into them mat or painted onto them that have educational value or entertainment value to an infant or toddler.

6. The mat of claim 1, wherein: the mat is fabricated from a compound made from recycled rubber tires.

7. The mat of claim 1, wherein: the features comprise raised areas into which are formed recessed sub-features.

8. The mat of claim 7, wherein: the sub-features are letters or graphic images.

9. The mat of claim 7, wherein: sub-features further comprise repetitive patterns which are adapted to induce vibrations, the sub-features have a spacing that is shorter than a spacing between adjacent gaps.

10. The mat of claim 1, wherein: the mat further comprises a border area that is lower than the features.

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