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(71) Applicant
Trevor Leslie Darrell Horne
Gardeners Cottage, By Banchory, Woodlands of
Durris, Kincardineshire, United Kingdom

(72) Inventor
Trevor Leslie Darrell Horne

(74) Agent and/or Address for Service
W P Thompson & Co
Coopers Building, Church Street, Liverpool, L1 3AB,
United Kingdom

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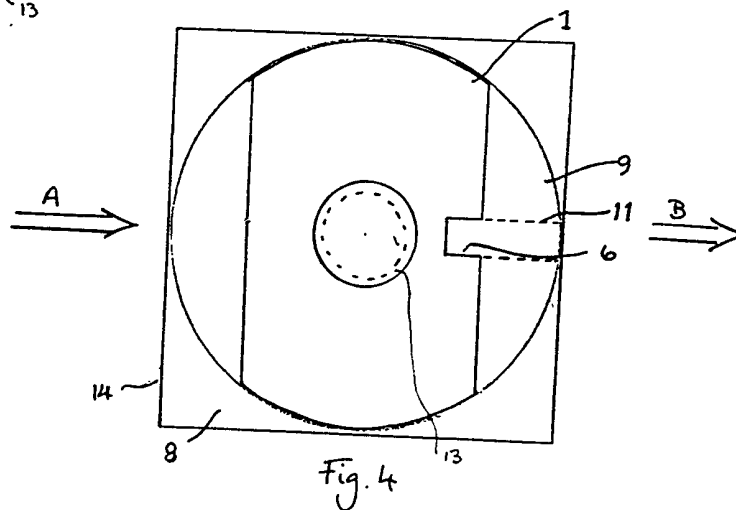
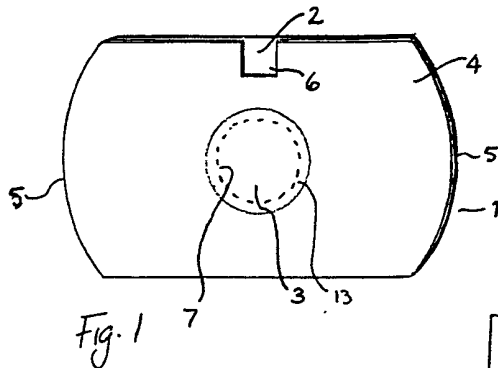
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EP 0265274 A2 EP 0230069 A1 US 4774618 A
US 4592042 A

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(54) **A business card**

(57) A business card (1) carries a magnetic strip (2) for holding machine readable data and is adapted to be mounted rotatably within a conventional disc reader to enable information stored on the card (1) to be read and stored and/or displayed. The card is adapted to be mounted in the conventional disc reader using an adaptor (8) into which the card (1) is inserted, prior to insertion of the adaptor (8) into the disc reader.



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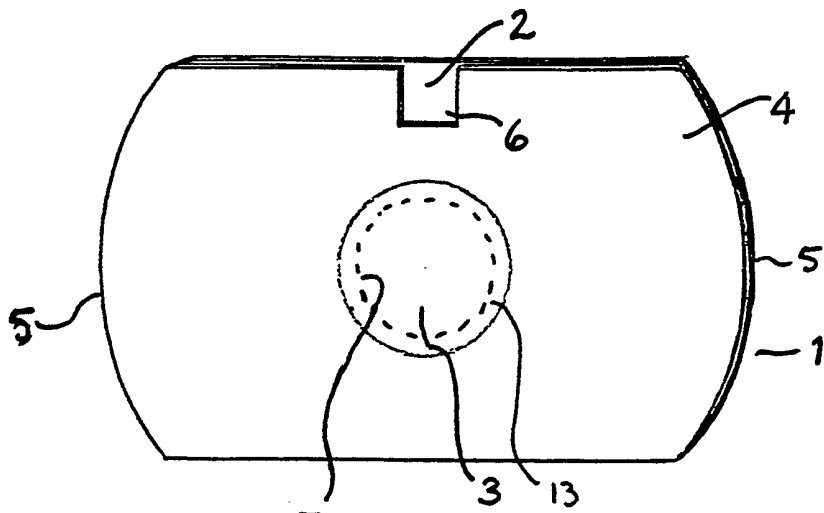


Fig. 1

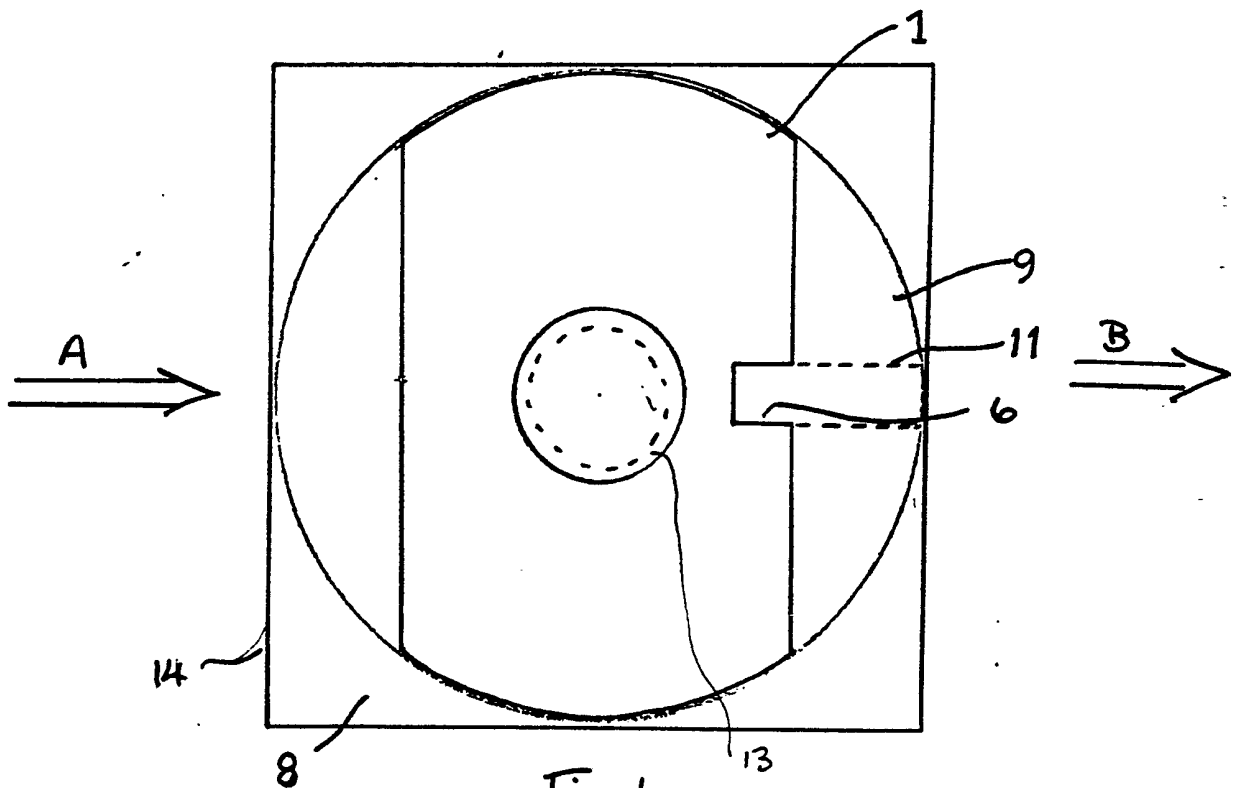


Fig. 4

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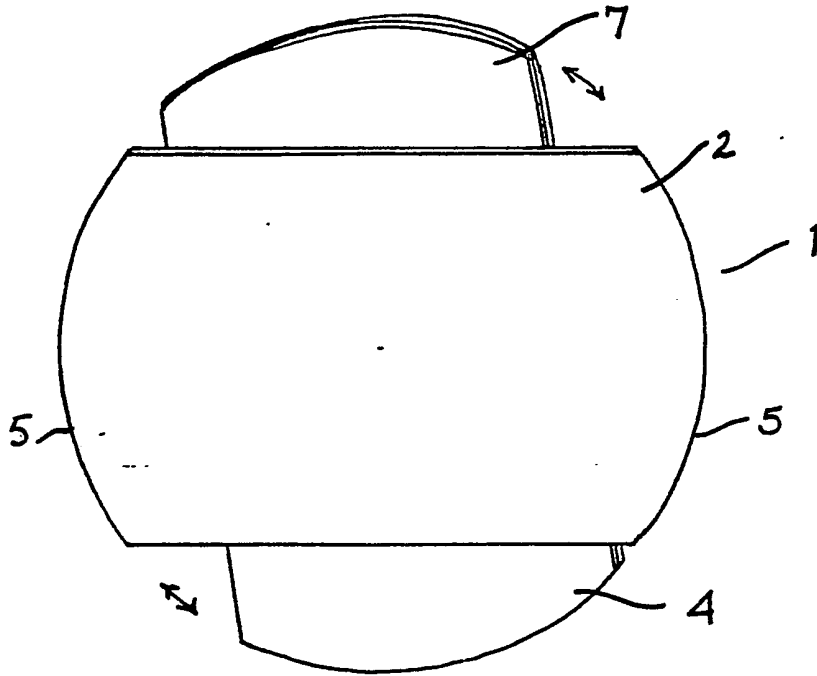


Fig. 3

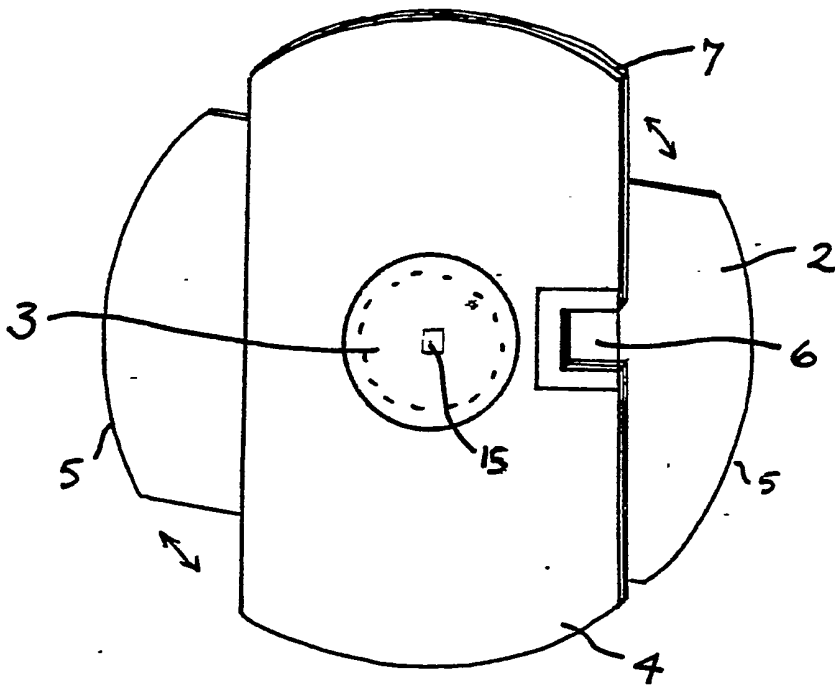


Fig. 2

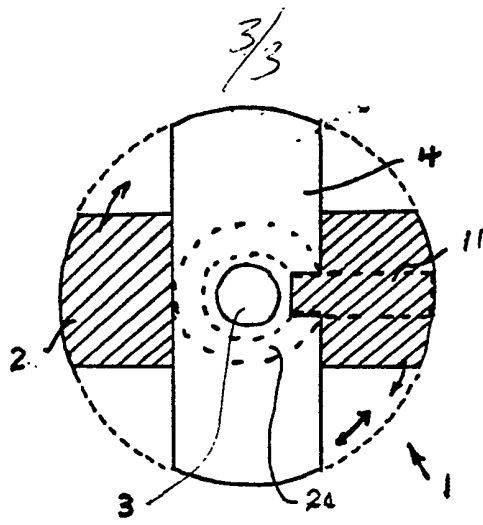


Fig 6

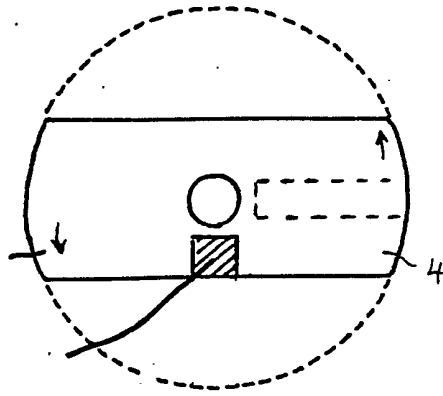


Fig. 5

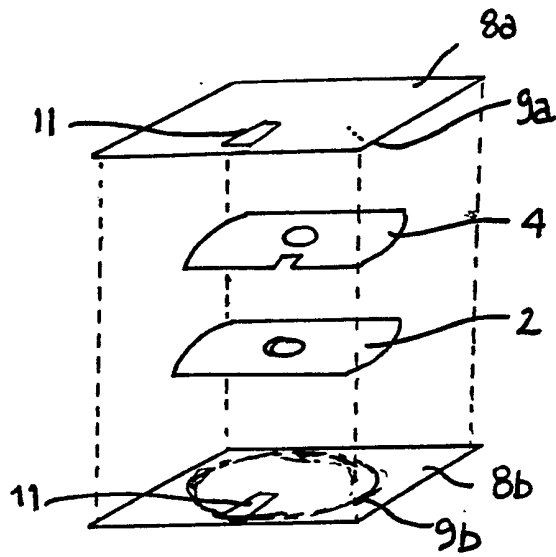


Fig 7

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DESCRIPTIONA BUSINESS CARD

The present invention relates to business cards.

Printed, cardboard calling cards are the conventional means of introduction used by business persons. The small dimensions of the conventional card, however, limit the amount of information that can be written on it. There is usually only room for very basic information, such as names, addresses and phone numbers, and not much space to divulge any information about the card holder, nor the firm which he or she may represent. If the recipient wants more information about the company or the representative, time consuming and costly communication then ensues.

It is an object of the present invention to provide a business card which is capable of carrying much more information than a conventional calling card but yet is not of significantly greater physical dimensions.

In accordance with the present invention there is provided a business card carrying a magnetic strip for holding machine readable data and being adapted to be mounted rotatably within a conventional disc reader to enable information stored on the card to be read and stored and/or displayed.

The magnetic strip is preferably carried by a stiff sheet of plastics or cardboard material.

A coupling means can be attached or coupled to the stiff sheet carrying the magnetic strip to enable rotatable engagement of the card with a drive device of the disc reader.

Preferably, the card also comprises a second sheet which is coupled to the first mentioned stiff sheet in facing juxtaposition, so that the two sheets are relatively rotatable, the second sheet including a window through which at least part of said magnetic strip may be accessed by the reader loads of the disc reader.

Preferably, the card is mounted in the conventional disc reader using an adaptor into which the card is inserted, prior to insertion of the adaptor into the disc reader. The adaptor supports the magnetic strip so that it can rotate therewithin about an axis coincident with that of the drive means of the disc reader.

By way of example only, a specific embodiment of the present invention will now be described with reference to the accompanying drawings, in which:-

Fig.1 is a front view of one embodiment of a business card in accordance with the present invention;

Fig.2 is a front perspective view of the business card of Fig.1, with the two relatively rotatable parts of the card displaced from their positions shown in Fig.1;

Fig.3 is a rear perspective view of the business card;

Fig.4 illustrates the business card of Fig.1 located inside an adaptor;

Fig.5 shows a configuration wherein the magnetic strip is not accessible by a disc reader;

Fig.6 shows a configuration wherein a part of the magnetic strip is accessible by the disc reader, and

Fig.7 is an exploded view from one side of an adaptor and the business card contained therein.

Referring first to Figs. 1 to 3, the illustrated business card 1 comprises a magnetic strip 2 mounted on a coupling means 3 which is adapted to be engageable with the drive means of a disc reader (not shown), and a window means 4 which serves to protect the magnetic strip and to enable part of the magnetic strip 2 to be visible to the disc reader.

The magnetic strip 2 comprises a sheet of high density plastics material which is faced on one side with magnetic computer disc material. The strip 2 is generally rectangular in shape but has a pair of opposite arcuate edges 5. A circular hole 7 is

provided in the centre of the strip 2 to accommodate the coupling means 3. Abuttingly disposed against the face of the strip 2 carrying the computer disc material is the window means which is in the form of a window card 4 of similar peripheral dimensions to that of the strip 2 except for the inclusion of a gap 6 in one of its straight sides through which part of the magnetic strip 2 is visible when the strip 2 and the window card 4 are superimposed as shown in Fig.1 so that their contours align. The window card 4 is made from a plastics or cardboard sheet and has an anti-static layer 7 provided on its face which abuts the magnetic face of the strip 2.

The two principal components of the business card 1, namely the magnetic strip 2 and the window card 4, are adapted to be relatively rotatable about the axis of the coupling means 3. In order to mount these parts together to enable relative rotation therebetween, the coupling means 3 can comprise a circular disc, made of metal or a rigid plastics material, attached centrally to the plastics sheet forming the magnetic strip 2. The disc thereby forms a circular boss which is arranged to extend loosely through a circular central hole in the window card 4 so that the card 4 can rotate freely thereon. The card 4 is held against axial retraction from the boss

formed by the disc by means of a peripheral flange 13 on the disc. By way of illustration, Figs.3 and 4 show two positions in which the magnetic strip 2 and window card 4 have been relatively rotated about the coupling means 3.

It will be appreciated that, when the magnetic strip rotates relative to the window card 4, through 360°, an annular portion 20 of the magnetic material of strip 2 is exposed through the slot 6 in the window card 4. On this annular portion of the magnetic strip 2 there is arranged to be magnetically written information that the holder of the business card wishes to communicate to the recipient of the card. For example, this information might include technical details of the person who holds the card, details of the Company he/she represents and its products. The annular portion is also segmented and formatted to enable it to be read by a standard disc reader.

In order to enable the information on the card 1 to be read by a standard disc reader, it is necessary for the card to be mounted in a suitable adaptor which is then inserted into the disc reader to enable the card to be presented to the reading heads.

One example of such an adaptor is illustrated in Figs. 4 and 7. The adaptor 8 shown in Figs. 4 and 7 is very similar to a standard disc holder of the type

which contains a conventional 3-1/2" hard disc and by which the latter disc is presented to the reading heads for introducing information to an associated computer. The adaptor 8 comprises two generally planar, rectangular components 8a and 8b which are mounted face-to-face and which contain respective circular guides on the facing surface which together define a circular recess for receiving the business card which is introduced in a direction A via an entry slot in one edge 14 of the adaptor. (NB the card 1 is in its configuration shown in Fig.1 when being introduced to the adaptor 8). The radial dimension of the internal recess of the adaptor is such that the magnetic disc 2 can rotate freely therewithin. Fig.5 shows diagrammatically the situation when the card 1 has been inserted into the circular recess (shown in chain line). When the card is thus mounted in the adaptor 8 and the adaptor is inserted in direction B into a computer disc reader (e.g. conventional IBM type), a central aperture 15 in the coupling disc 3 is arranged to be engaged by the drive means of the disc reader so that the magnetic disc 2 can be rotated within the adaptor.

The position of the computer reading heads within the reader are located at a position marked in Fig.4 by the reference numeral 11. It will be appreciated

that, with the magnetic strip 2 and window card 4 of the business card 1 in their relative orientations when the card is inserted, the reader heads have no access to the annular portion of the magnetic strip on which the information is written. In order to enable such access, the initial rotation of the drive means of the reader is arranged to rotate the window card through 90° (anti-clockwise, as viewed in Figs. 5 and 6) to bring it to the position shown in Fig.6 in which the window 6 lies opposite to the reader heads 11. Further rotation of the window card is prevented by suitable spring-loaded stops (not shown) located within the adaptor. Further rotation of the drive means then causes the magnetic strip 2 to be rotated relative to the stationary window card 4 so that the annular strip is rotated past the heads to enable the information contained therein to be read. Anti-static and cleaning materials on the window card keep the magnetic strip clean and free from static during this rotation. When the drive means is withdrawn from the coupling means 3 at the completion of reading, the spring means (not shown) automatically return the window card through 90° to its initial orientation so that the card 1 can thus be withdrawn from the adaptor by a suitable ejection mechanism (not shown).

As an alternative to the above described arrangement, a saw-toothed edge can be provided on the inner perimeter of the hole 7.

The capacity of information which can be stored on such a business card is thus increased considerably with respect to conventional calling cards. As mentioned above, such information may include, for example, details of the person holding the card, and relevant Company information, such as the nature of the Company's business and their products. When the card is handed over to a client (who will have a computer and a disc reader), the card can be fitted into an adaptor 8 and thus inserted into the computer in order to access and display the information on the card. The information is protected in the normal way a standard computer disc is protected. Data on the card can be changed, if required, by the Company or card holder by re-writing on an IBM compatible type computer/word processor.

Many variations on the above described embodiment are possible, for example, in the coupling means by which the card is rotatable by the drive means of the reader, in the means by which the window card and magnetic strip are coupled together and in the general configuration of the components.

The plain side of the card 1 opposite to that carrying the magnetic strip 2 can, if required, carry ordinary printed information corresponding to the details provided on a conventional calling card.

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CLAIMS

1. A business card carrying a magnetic strip for holding machine readable data and being adapted to be mounted rotatably within a conventional disc reader to enable information stored on the card to be read and stored and/or displayed.

2. A business card as claimed in claim 1, wherein the magnetic strip is carried by a stiff sheet of plastics or cardboard material.

3. A business card as claimed in claim 2, wherein a coupling means is attached or coupled to the stiff sheet carrying the magnetic strip to enable rotatable engagement of the card with a drive device of a disc reader.

4. A business card as claimed in claim 3, wherein the card further comprises a second sheet which is coupled to the first mentioned stiff sheet in facing juxtaposition, so that the two sheets are relatively rotatable, the second sheet including a window through which at least part of said magnetic strip may be accessed by the reader heads of the disc reader.

5. A business card as claimed in claim 1, 2, 3 or 4, which is adapted to be mounted in a conventional disc reader using an adaptor into which the card is inserted, prior to insertion of the adaptor into the disc reader.

6. A business card and adaptor combination as claimed in claim 5, wherein the adaptor is arranged to support the magnetic strip so that it can rotate therewithin about an axis coincident with that of the drive means of a conventional disc reader.

7. A business card and adaptor combination as claimed in claim 6, wherein the adaptor includes internal spring-loaded stop means which are adapted to prevent rotation of the second sheet in the adaptor by more than a predetermined angle, so that, when the adaptor is inserted into a conventional disc reader and the reader is operated to rotate the business card, the magnetic strip on said first mentioned sheet is exposed to the reader heads of the disc reader.

8. A business card and adaptor combination as claimed in claim 7, wherein said spring-loaded stop means are arranged to return the second sheet through said predetermined angle to its initial orientation when the adaptor is withdrawn from the disc reader.

9. A business card substantially as hereinbefore described with reference to and as illustrated in Figs. 1, 2 and 3 of the accompanying drawings.

10. A business card and adaptor combination substantially as hereinbefore described with reference to and as illustrated in Figs. 4 and 7 of the accompanying drawings.
