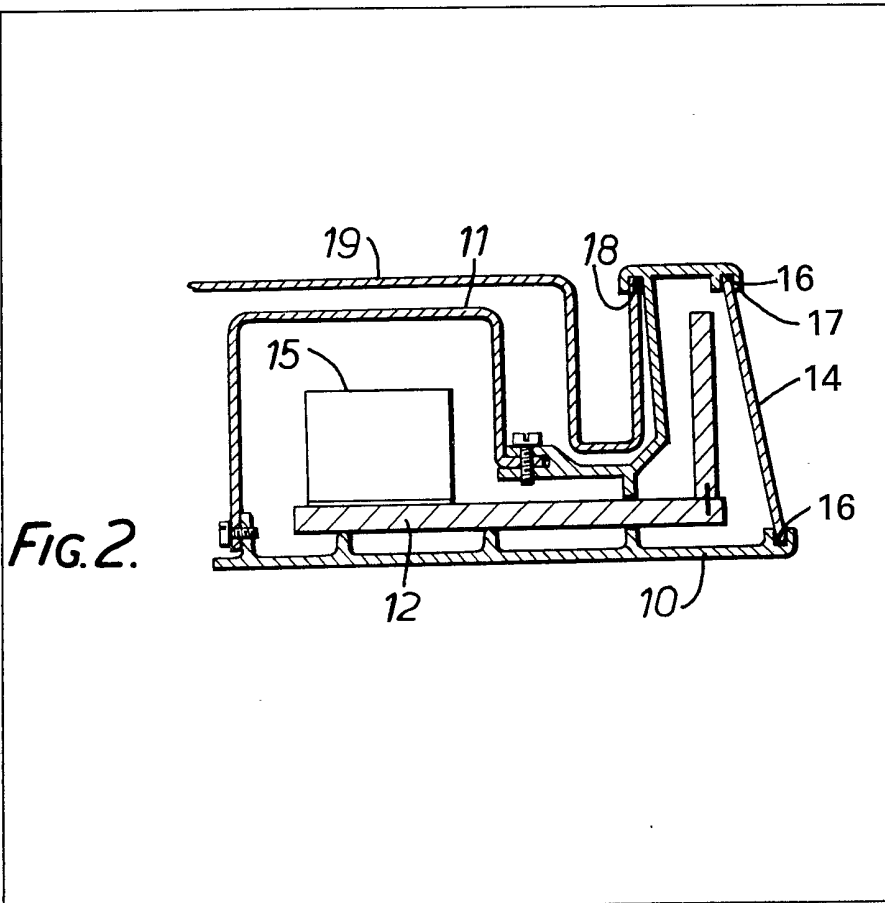


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- (71) Applicants
Fuicon Industrial
Services Limited,
10 Heronden Road,
Park Wood Industrial
Estate,
Maidstone,
Kent,
ME15 9YS.
- (72) Inventors
Eric John Eve
- (74) Agents
Sorrell & Son,
Otham,
Maidstone,
Kent,
ME15 8RR.

(54) Display devices

(57) A merchandising device comprising a programmable alpha-numeric display device 13 is arranged to be located at the leading edge of a shelf or canopy 19. The device may comprise a housing 11 which is in the form of a generally U-shaped hollow casing with a fixing lip 18. The casing may contain a printed circuit board 12, a control circuitry 15 and a display device 13 in the form of a vacuum phosphorescent array of alpha-numeric multiple digits or characters enclosed in an evacuated glass strip. The messages may be altered by inserting a fresh pre-programmed memory or by connection to a data input device.



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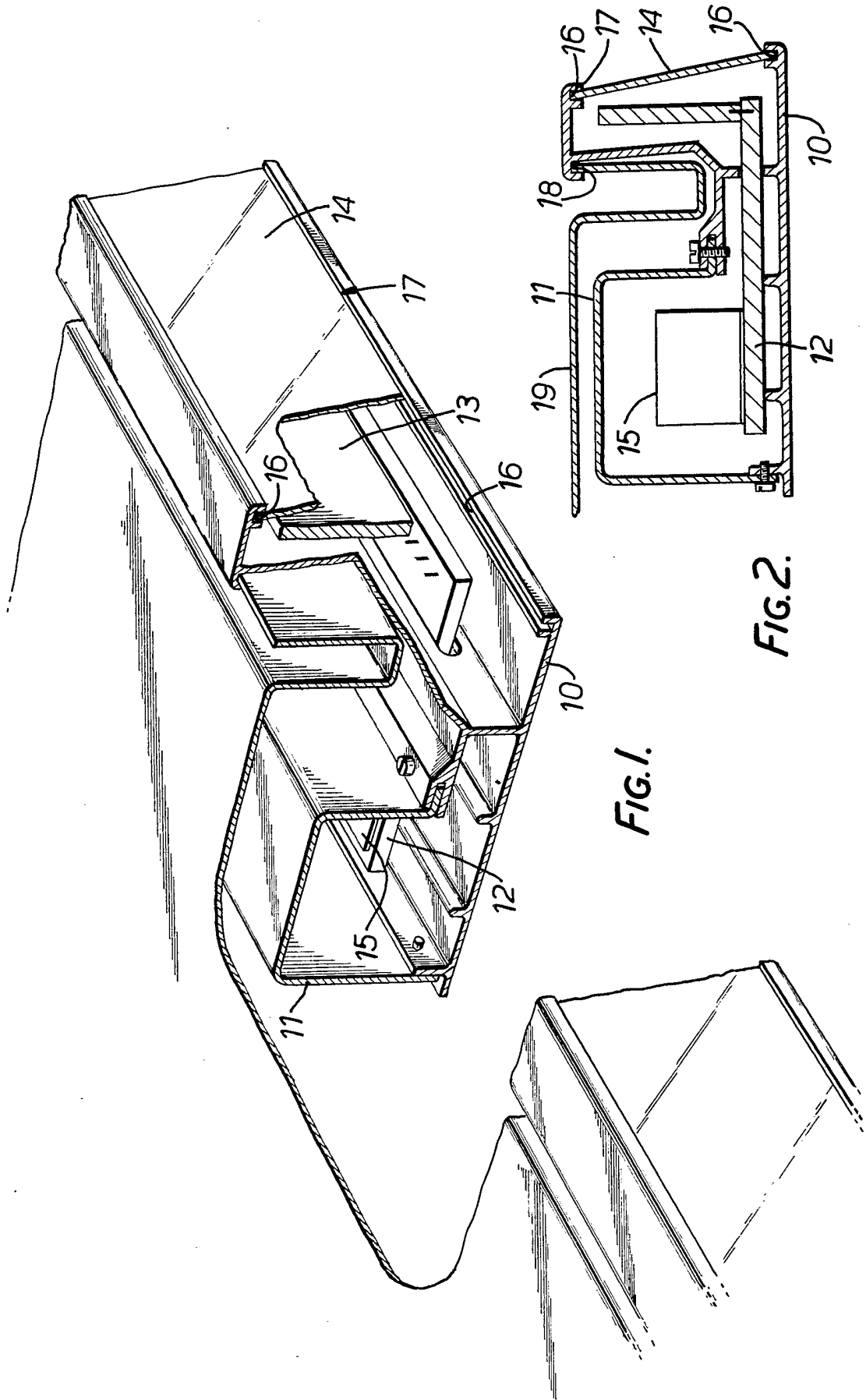
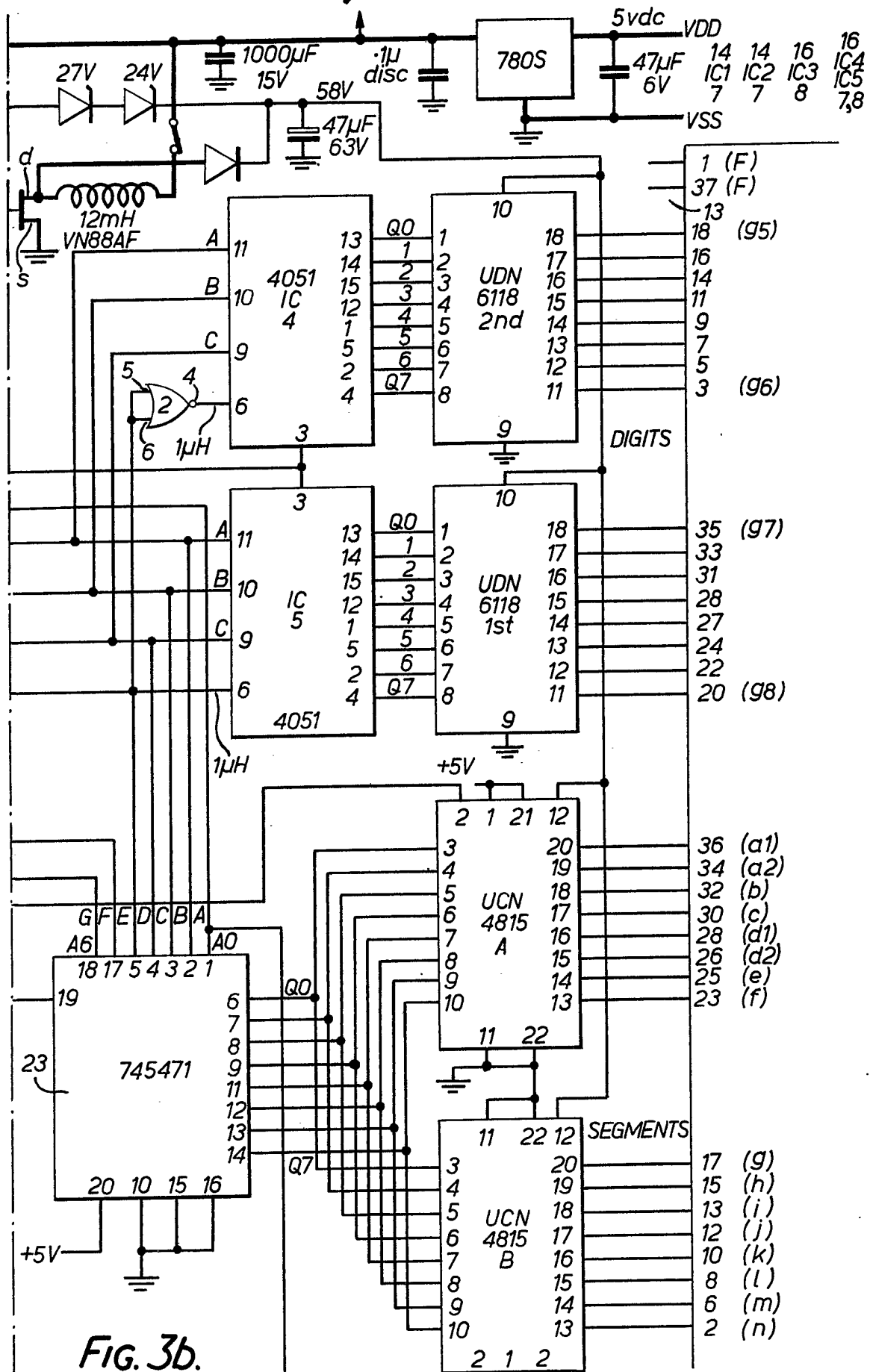


FIG. 1.

FIG. 2.



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SPECIFICATION

Improvements in and relating to merchandising devices

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The invention relates to merchandising devices.

According to the invention there is provided a merchandising device which comprises a programmable alpha-numeric display device arranged to be located at the leading edge of a shelf or canopy.

The device may comprise a housing which is in the form of generally U-shaped hollow assembly which may be extruded or fabricated having a circuit board extending between each arm thereof, the display device being located in one arm and control circuitry therefore being located in the other arm.

The display device may comprise a vacuum phosphorescent array of alpha-numeric multiple digits and/or characters enclosed in an evacuated glass strip. The display device may comprise a fluorescent display.

The device may be formed integrally with a shelf or canopy.

The foregoing and further features of the invention may be more readily understood from the following description of a preferred embodiment thereof, by way of example, with reference to the accompanying drawings, in which:-

Figure 1 is a perspective view, part cut away, of a merchandising device mounted on a shelf;

Figure 2 is a side sectional view of the device of *Figure 2*, and

Figure 3 is a block schematic representation of a control circuit for use in the device of *Figures 1* and

2.

Referring now *Figures 1* and *2* there is shown a merchandising device which comprises a generally U-shaped longitudinally extending housing made up of a front housing 10 attached to which as a rear cover 11. The housing 10 and cover 11 may be extruded and formed of aluminium or a synthetic plastics material alternatively these may be fabricated from steel. A printed circuit board 12 is located in the housing and extends from a display device 13 at the front of the housing to beneath the rear cover 11 where the control circuitry 15 is housed. A filter member 14 is located in slots 16 formed around an aperture 17 at the front of housing so that display device 13 can be viewed therethrough.

The housing 10 is formed with a lip 18 at the top of the rear surface remote from filter 14, which lip 18 engages over the outer edge of a channel formed in a shelf 19, for example a shelf as utilised in a supermarket.

Referring now to *Figure 3* there is shown a control circuit for use in a device as described for *Figures 1* and *2* which comprises a power supply 20, and clocks 21 which drive logic circuitry 22. The logic circuitry 22 provides a multiplexed drive to sixteen display digits drivers and the command data to a pre-programmed read only memory 23 which in turn supplies the data to sixteen display segment drivers.

The display and segment drivers provide the necessary interface between the logic and the sixteen character fluorescent display.

The display device 13 is a vacuum phosphorescent array of alpha-numeric multiple digits and/or characters enclosed in an evacuated glass strip. It emits a blue-green light which has high brightness, over a wide viewing angle providing excellent visibility even in day-light.

The merchandising device is intended for use on shelves or canopies in shops to display messages and/or prices relating to the goods located on the shelves. The messages can be altered by inserting a fresh preprogrammed memory or by connection to a data input device.

CLAIMS

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1. A merchandising device which comprises a programmable alpha-numeric display device arranged to be located at the leading edge of a shelf or canopy.

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2. A merchandising device as claimed in claim 1 comprising a housing which is in the form of generally U-shaped hollow assembly which may be extruded or fabricated having a circuit board extending between each arm thereof, the display device being located in the other arm.

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3. A merchandising device as claimed in claim 1 or 2 wherein the display device comprises a vacuum phosphorescent array of alpha numeric multiple digits and/or characters enclosed in an evacuated glass strip.

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4. A merchandising device as claimed in any preceding claim wherein the display device comprises a fluorescent display.

100

5. A merchandising device as claimed in any preceding claim formed integrally with a shelf or canopy.

6. A merchandising device substantially as hereinbefore described with reference to the accompanying drawings.

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