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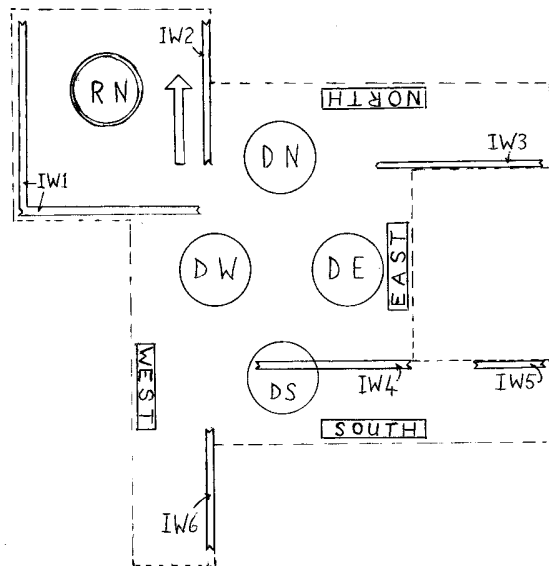
(52) UK CL (Edition X):
A6H HJE

(56) Documents Cited:
US 3102728 A **US 1962710 A**

(58) Field of Search:
UK CL (Edition X) **A6H, G5G**
INT CL⁷ **A63F**
Other: **EPODOC, WPI**

(54) Abstract Title: **A board for card games**

(57) A board for card games such as duplicate contract bridge comprises a board with raised sides. Holes are cut into the board and into the sides to assist with picking up the cards. Legs may be fitted to the underside of the base. The cards are placed on the base. In a second embodiment the cards overhang the edges of the board. The boards are intended for use with narrow cards with a larger typeface and clear indicia.



Symbols and Layout

AKQJ1098765432 R4

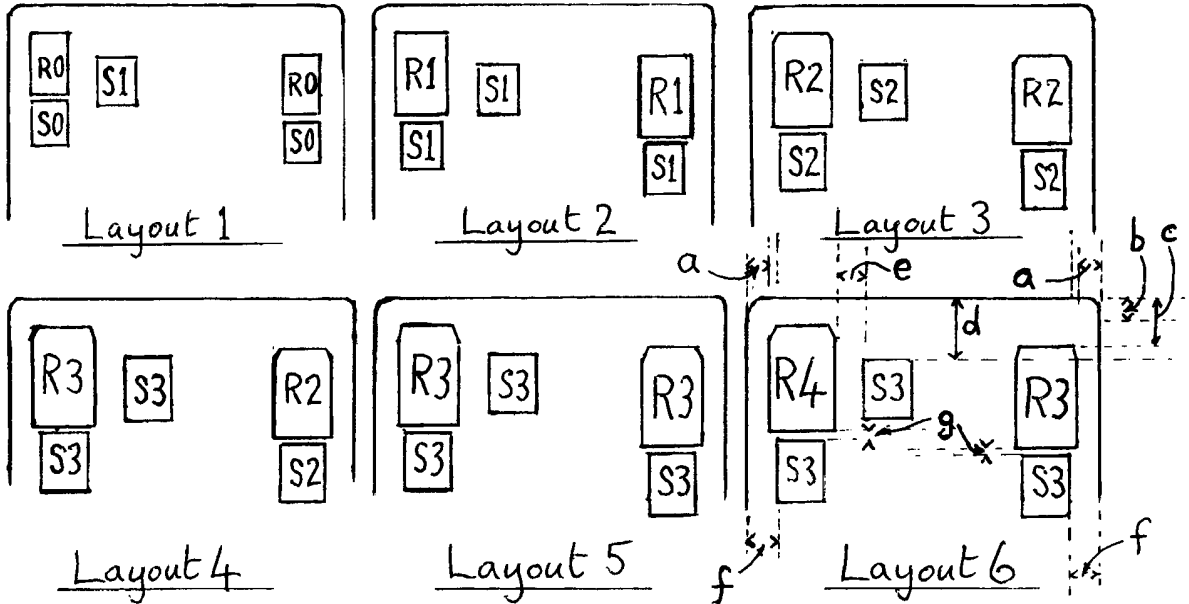
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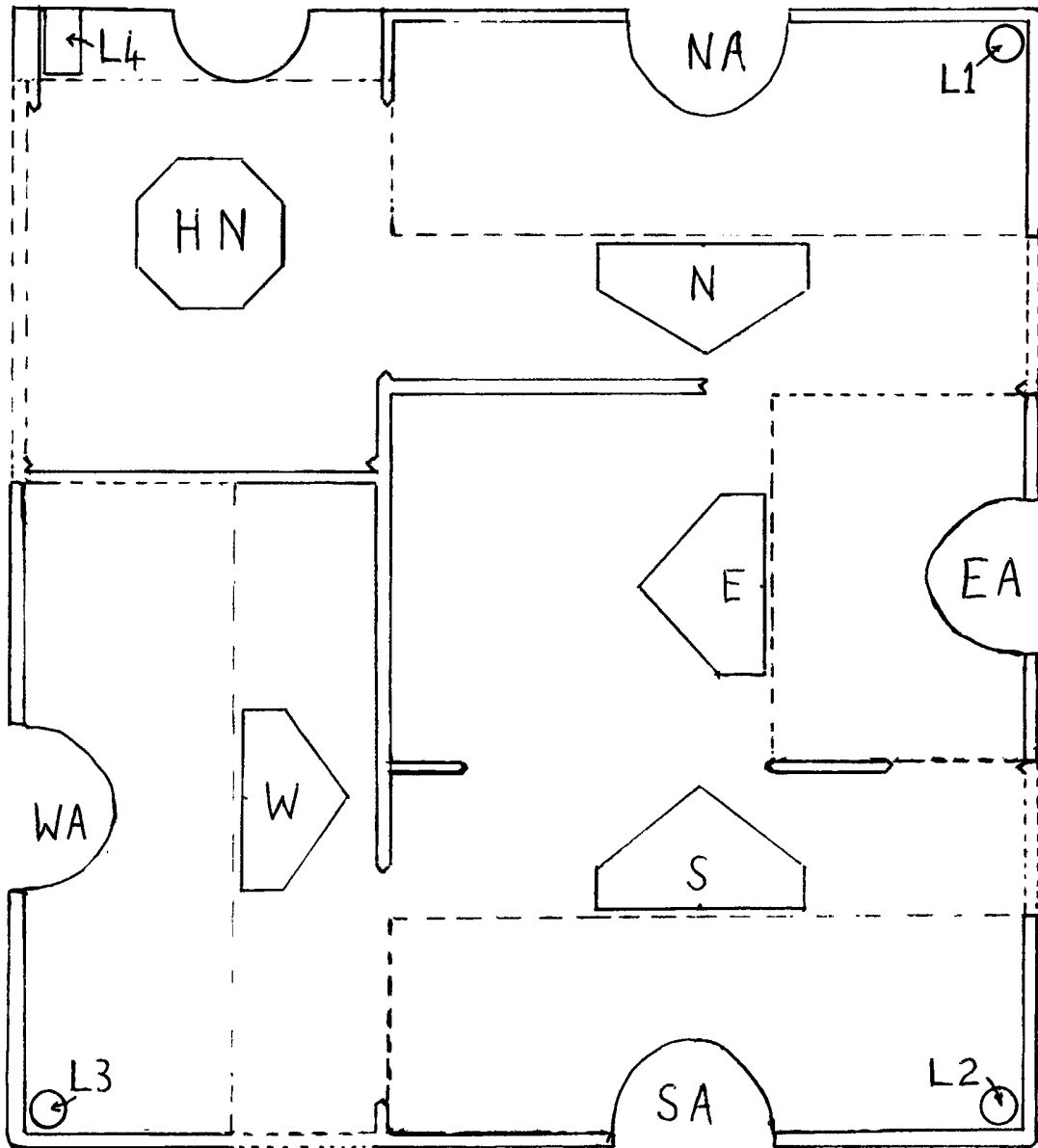
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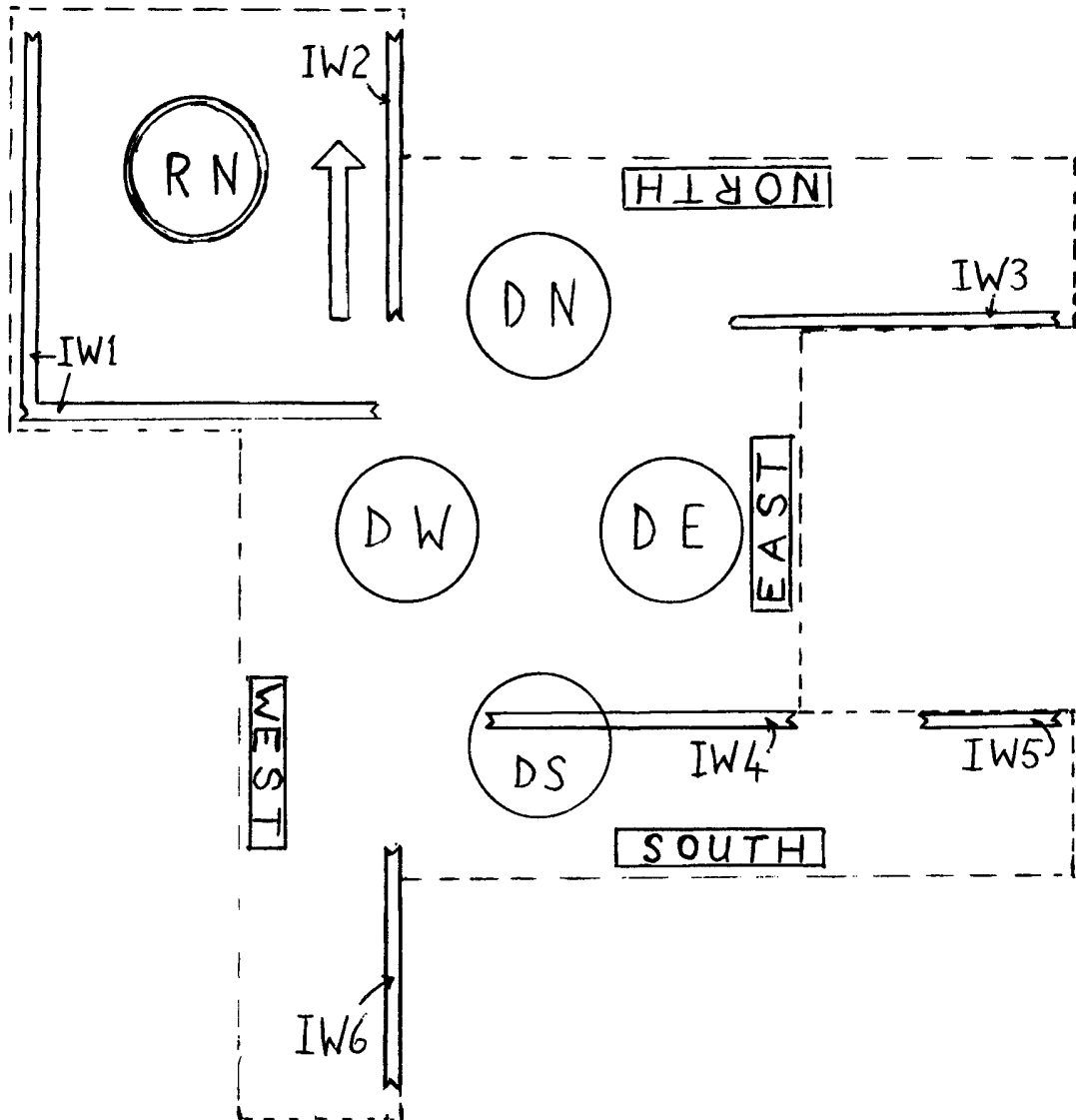
2/3

Diagram 1



3/3

Diagram 2



A Carrying Case for redesigned playing cards.

Background

Preamble

Traditional cards have been used for a long time with steady improvement of the materials (plasticised card and more accurate printing of symbols). However, players still get a stray heart in with the diamonds and vice versa. Also as players age their eyesight isn't as good as it was and some players have medical problems causing visual abilities to decline.

Anyone who plays Duplicate Contract Bridge will have bemoaned the clutter on the table. Bidding Boxes have become accepted as normal and we are willing to help the unfortunate player who has to pick up their box from the floor! However, when dummy is placed on the table the problem of what to do with the card holder "board" is sometimes solved by breaking the rules and temporarily removing it to the floor or putting it under one of the bidding boxes. When the rules are kept and the board stays in a central rectangle with the correct orientation it can be difficult to find space for a long suit of seven or more cards (admittedly not a common problem). Some declarers like to have dummy much nearer to them than others. This may be related to problems of seeing the cards.

Previous efforts to help the partially sighted -- chunky symbols and four colours for the suits -- have not met with enthusiasm despite a willingness to try them out. Surprisingly, those for whom it was hoped there would be benefits have not been impressed. The chunky symbols get partially hidden when the cards are fanned normally and the colours tried out have been considered to be "psychedelic".

Recently the boards used at Congresses and for special events like simultaneous pairs have been prepared by "Duplimate" machines. The cards used have bar codes and the boards are designed to be filled by the machine. These are expensive machines and have a limited clientel, but their existence is noteworthy, if only to show that change is part of the modern game of Bridge. In the process of looking at ways of helping people with visual problems it was realised that the cards themselves do not need to be bigger and indeed could be considerably narrower while retaining a height of 88mm as for most packs used for duplicate bridge

Attempts to improve the card face.

To help produce a more user friendly card face, a more efficient layout of the symbols for rank and suit is proposed with a range of specified sizes (without rejecting the traditional and familiar ones) for the rank symbols and similarly for the suit symbols. The new layout allows the cards to be "fanned" normally and may be used on much narrower cards than the traditional 58mm width with no obvious difficulties for sorting by people with arthritis and smaller cards might be more appealing to young children. They also use much less room when laid out in columns as in patience games and when placed on the Bridge table in front of dummy for declarer to play. Consequently new widths of card are proposed. The layout allows space for "duplimate" bar codes and leaves a central area clear.

The positioning of the symbols relative to the edges of the cards and to each other is optimised for visual clarity. The cards are 180 degrees rotationally symmetric so only the top half need be shown. (See Diagram sheet 1)

Modified symbols for the minor suits (diamonds and clubs) are suggested.

Five sizes of rank symbol are specified:- R0 (9mm x5mm, the traditional and smallest size), R1 (11mm x7mm), R2 (12 or 12.5mm x8mm), R3 (13.5mm x 8.5mm) and R4 (14mm x 9mm, the largest size suitable for 88mm tall cards). In the case of R2, R3, R4 the rectangular area is modified by the removal of small triangles at the two top corners (0.5mm x1.5mm for R2 and 1mm x2mm for R3 and R4). The symbols are intended to fully use the space provided

Four sizes of suit symbols are specified:- S0 (6mm x5mm), S1 (6.5mm x5.5mm), S2 (7.5mm x6mm) and S3 (8mm x6.5mm). These can also be seen on the first Diagram sheet.

The rank symbols can be printed in solid black or red (there is a familiarity there for which no demand for change has been established). Similarly the suits would retain black and red. S3 is used to illustrate this. S2, S1 and S0 illustrate how the minor suit symbols could be modified. They are "see - through" and will remain black or red. These modified symbols could be used for all the sizes.

All six layouts have common features. Refer to Layout 6 and the letters a, b, c, d, e, f and g.

a = 3mm (unless it is reduced to 2.5mm for the Jumbo rank symbols R4).

b = 3.5mm.

c = 6.5mm.

d = 6.5mm (For R3 and R4 symbols it can increase to 8mm).

e = 4mm (modifications between 3mm and 8mm are worth considering).

f = a + 1 (except for Layout 1 where f = a)

g = 1mm (but could be increased to about 2mm).

The smallest practicable width with the smallest symbols is 46mm (See Layout 1). Layouts 2 to 6 show cards 46.5, 47, 47.5, 48, 48.5mm wide. The size of symbols increases for each layout. All the layouts can be used on wider cards than the minimum shown in the six illustrations (but not on narrower ones).

A further range of cards 3mm wider than those illustrated (i. e. 49, 49.5, 50, 50.5, 51, 51.5mm) is possible.

Cards 52mm and above will fit into the current boards and will not be considered further.

Having attempted to optimise the cards for visibility and size, they will be referred to as OPTIVISI CARDS.

Statement of Invention

For duplicate contract bridge at club level a new design of carrying case or "board" in standard and larger versions is proposed. These two boards have "footprints" of 233.7 sq. cm. and 254.2 sq. cm. respectively. This compares with 305 sq. cm for the boards now in common use. These represent reductions of 23% and 16% respectively. The standard version is described in detail (see the full size drawings on diagram sheets 2 and 3). The larger version is also described in outline.

Description

Cards with widths from 46mm to 48.5mm can be accommodated in a standard carrying case "board" for duplicate bridge at club level (159.5mm x 146.5mm x 9mm)

Widths from 49mm to 51.5mm would require a "larger" carrying case 169.5mm x 150mm x 9mm.

Specification for OPTIVISI carrying case

A. Standard version

Diagram 1 (on Drawing Sheet 2) shows the base of the case. For simplicity it is assumed that the case will be made of plastic 2mm thick, but a thinner gauge should also be considered. The base is shown with holes HN, N, E, S, W (1. To reduce the weight. 2. To act as a means of improving the location of the "boards" when they are stacked.). It is also provided with legs L1, L2, L3, L4 which also help with location when the boards are stacked.

NA, EA, SA, WA are Access holes for extracting the cards with finger and thumb.

EA is 21.5mm wide and it is centrally placed. The other access holes are 23 mm wide, WA is placed centrally, SA and NA may be displaced 2mm from the centre position to avoid lining up too many holes. The "up-walls" are 7mm high except where they accommodate the lid (when they are 5mm high for a 2mm thick lid)

Diagram 2 (on Drawing Sheet 3) shows the lid (with internal "down walls" 5mm (possibly reduced to 4.7mm) high labelled IW1, IW2 etc. to IW6) DN, DE, DS, DW are circular depressions 0.5mm deep with a diameter of 20mm to allow for stickers indicating vulnerability (or not), orientation and dealer. The feature RN is embossed i.e. the outer rim is raised 1mm leaving the centre depressed to give space for a sticker showing the board number (1 to 32). This has an outer diameter of 20mm allowing it to engage with HN when the boards are stacked and an internal diameter of 18mm. Similarly the rectangular NORTH, SOUTH, EAST and WEST directions are raised 1mm with the words cut out to a depth of about 0.5mm.

The various stickers on the (standard) OPTIVISI board could be replaced by one rectangular sticker 36mm x 46mm which would include the board number, the dealer and the vulnerability. 32 of these can be printed on a sheet of A4 size.

B. Larger version

This will have card slots 90.5mm by 53.5mm (For N, S and W) and 90.5mm by 54.5mm (For E).

Both versions are capable of holding cards 88mm or 87mm tall. Less tall cards down to 85mm would fit in. However, the fan angle required increases (with the proposed symbols and layout) to an unacceptable size for cards only 85mm tall.

Cards of a height of 86mm, 87mm, or 88mm are the only ones considered suitable for duplicate Contract Bridge use. These carrying cases are designed with that use in mind.

Table showing comparison of the two versions with the current one in general use.

Version	Standard	Larger	Current
Width of card used (mm)	46 to 48.5	49 to 51.5	Approximately 58
Overall dimensions (mm)	159.5 x 146.5	169.5 x 150	189 x 161.5
Footprint (sq. cm.)	233.7	254.2	305

Further comments.

Manufacturers of the smallest cards can expect a saving of 19% in the materials used. They may well use much less ink unless they fill the centre of the face with advertising. Even then there should be a 20% saving and in addition the advertising should bring in additional revenue

This design of card allows space for the Duplimate bar codes, on the top edge(s) and to the right of centre. The duplimate machines may not need modification to cope with 47mm or 48mm widths.

The duplimate boards could then be reduced from about 95mm x 255mm to 95mm x 210mm This 17% reduction in the length would be welcome by North - South pairs. Directors will also appreciate a saving of 18% in the weight of a board full of cards.

It should be noted that 88mm x 48mm cards can be used in the various current boards with relatively little inconvenience when extracting the cards. (The symbols on the faces can be seen if the boards are held upside down, however).

Travelling score slips don't need to be changed. They will need to be folded to fit in the 47mm x 52 to 62mm (5mm deep) slot (for the standard size board). Players will suit themselves how they do this just like they do now!

Duplimate boards have a unique method for holding travelling score slips and this would remain unchanged (for now?).

Claim

A carrying case in two sizes to be used in duplicate bridge for playing cards with a new facial layout and a range of sizes for suit and rank symbols which allows the width of the cards to be reduced while offering more clarity for all players, especially those with visual difficulties.



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Application No: GB0417396.9

Examiner: Mrs Margaret Phillips

Claims searched: 1

Date of search: 7 November 2005

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	-	US 1962710 A (DORNEY et al) Whole document.
X	-	US 3102728 A (BOOTH) Whole document

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

A6H; G5G

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

A63F

The following online and other databases have been used in the preparation of this search report

EPODOC, WPI