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(71) Applicant (for all designated States except US): **ELECTROCOIN LEISURE (S.WALES) LIMITED** [GB/GB];  
Advance House, 186 Brent Crescent, London NW10 7XR (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **STERGIDES, John** [GB/GB]; 47 Witley Court, Coram Street, London WC1N 1HD (GB).

(74) Agents: **MIDDLEMIST, Ian, Alastair** et al.; Wilson Gunn, 5th Floor, Blackfriars House, The Parsonage, Manchester M3 2JA (GB).

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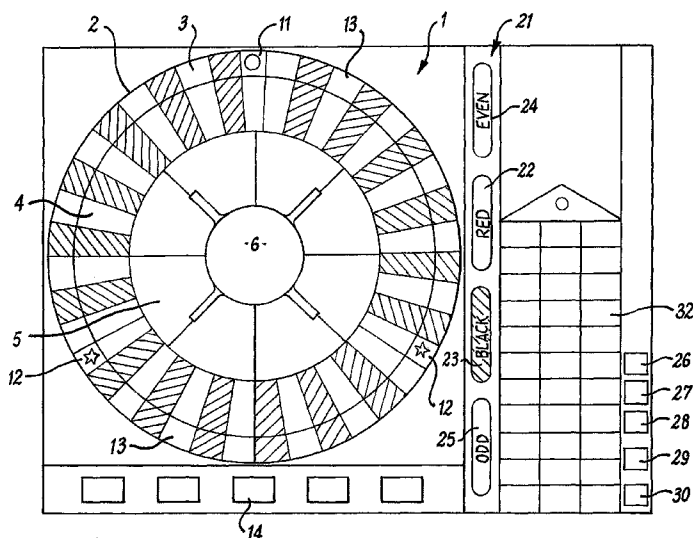
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(54) Title: AMUSEMENT OR GAMING APPARATUS



(57) Abstract: Amusement or gaming apparatus comprises coin operated apparatus adapted for playing of a roulette game which is enhanced by a bonus game. The apparatus comprises an actual or a simulated roulette wheel (2) with a circular track (3, 4) and a matrix (32) of numbered squares comprising an array (32) to one lateral side of the wheel. The matrix (32) is interactive, by means of a cursor and mouse, or by embodiment as a touch screen, for selecting numbers and placing bets. The track (3, 4) includes in addition to the usual numbered spaces and a zero, two unnumbered and preferably distinctively coloured spaces (12) which enable access to a bonus game if a first ball lands on one of these spaces. The bonus game preferably makes use of a distinctively coloured ball.

**AMUSEMENT OR GAMING APPARATUS**

This invention relates to improvements in amusement or gaming apparatus, in particular to coin operated apparatus adapted to the playing of an enhanced roulette based game.

5           It is well known to construct coin operated amusement or gaming machines which embody a roulette game, or provide an electronic display simulating a roulette wheel and the playing of a traditional roulette game.

In the traditional game, a wheel is provided which has 36 sockets to receive a ball, in a circular track, numbered from 1 to 36 and alternately coloured red and black.

10       This is associated with a board or table marked with red and black squares in a chequerboard pattern numbered to correspond to the ball receiving sockets in the wheel, bets being placed by placing tokens on the squares on the table. A ball is then projected tangentially into the wheel which is spun and races several times around the track until it is brought to rest and falls into one of the sockets. Any player who has

15       bet on the corresponding number is declared to have won.

In the casino game, interest is maintained by several players placing bets at the same time, with the winner taking the losing bets as his prize, or the 'house' taking all bets if the ball rests on a number on which no bet has been placed. Potentially high payouts, and a competitive element build up interest.

20           When the game is simulated in an amusement or gaming machine, it is more usual to have each game played by a single player, although some machines may provide for simultaneous play by two or more players.

However, in the single player game as played on an amusement or gaming machine, the odds against winning are 35:1 and in the UK under current law in

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machines outside a licensed casino, for example located in public houses, clubs or amusement arcades, stakes are limited to a maximum of 50p, so that the highest payout would be about £18.00. This makes roulette simulation relatively unattractive as compared to machines with other games offering longer odds and higher maximum prizes although with reduced frequency of payouts.

It has been proposed to lengthen the odds in roulette simulating games by introducing additional 'void' sockets upon which bets cannot be placed, and indicated for example as '0', '00' etc. However, this is not completely satisfactory.

It is an object of the invention to provide an amusement apparatus, adapted to enable playing of a game derived from a simulation of roulette, by means of which heightened interest may be obtained, and with the possibilities of increased prize money as compared with a basic roulette simulating game.

According to the invention there is provided amusement or gaming apparatus adapted to simulate a roulette based game, comprising a real or simulated roulette wheel, having number spaces each providing a station to halt a real or simulated ball, and differentially coloured in first and second colours, and means for enabling bets to be placed in any selected number space or colour, characterised in that one or more extra spaces are provided, and in that the apparatus is arranged so that should the ball halt in said one, or one of said, extra space or spaces, access is given to a bonus game.

The extra space or spaces may be differentially coloured with a third colour. The number spaces may be coloured alternately red and black as conventional and the extra space or spaces coloured for example green or blue.

The bonus game may comprise an extra play, involving use of a further differentially coloured ball or simulated ball, e.g. a gold ball. The rules of the bonus

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game may provide that to win the bonus game, the further ball must terminate in the same extra space to yield an enhanced prize.

The apparatus preferably provides control means for operating the basic game, and for operating the bonus game, including where appropriate means for controlling  
5 a display simulating the action of the game, such as spinning the wheel, and the trajectory and randomly determined end point of the first and second balls.

The control means may be operable in a bonus game, either to provide a 'free' game or to accept any accumulated winnings as the stake in the bonus game, and in the latter case to provide a prize in the event of a win in the bonus game, which is a  
10 multiple of the accumulated winnings.

If more than one extra space is provided, then the bonus game may be arranged to declare a win if the bonus ball lands on any of the extra spaces, perhaps with a reduced payout relative to that accorded in the event of the bonus ball finishing on the same space from which the bonus game was won.

15 An embodiment of amusement or the like apparatus according to the invention will now be described by way of example with reference to the accompanying drawing, wherein the sole figure is a view of a display panel of the apparatus, adapted to simulate a roulette based game.

The display panel 1 features a circular array 2 representing a roulette wheel.  
20 This features an outer circle 3 of 39 spaces, and an inner ring 4 of 39 wedge-shaped sections, aligned radially with the spaces in circle 3. Within the ring 4 is an area 5 of distinctive colour, marked into eight wedge-shaped segments and a central boss 6, depicting the spinner of an actual roulette wheel.

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The 39 spaces of the outer circle 3, feature three distinctive spaces, located at 120° (third of a circle) intervals about the outer circle 3. These comprise a zero space 11, which is distinctively coloured, for example green, and two spaces 12 each marked with a star, and distinctively coloured blue. The aligned wedges of ring 4 are also respectively coloured green and blue. The remaining spaces 13 of the outer circle are numbered in a random sequence from 1 to 36, (so that consecutive numbers are not adjacent). Alternate spaces 13 of the outer circle are coloured red and black, and the aligned wedge-shaped sections are coloured red or black, the same as the respective aligned spaces 13 of the circle 3.

10       The display also comprises, along the lower edge of the wheel display, a row of control buttons 14, governing functions, such as setting up autoplay, clearing one or more bets, requests for information, and the like. These buttons 14 may be embodied as mechanical spring loaded buttons, or as touch screen areas or stylus operated switches.

15       To one side of the screen, is a wager placing area 20, which features a row 21 of zones for placing bets on the outcome of a roulette game to select either red (22) or black, (23), or even (24) or odd (25) numbers denoting the space in the ring 4 in which a virtual ball terminates its travel. Along the edge of the screen are windows for displaying the value of a bet placed (26), the amount of any win (27) and the  
20       current credit standing to the player (28). This array also includes a button 29 to be activated to repeat a bet in the next play, instead of changing the selection, and a 'spin' button 30 to cause the display to simulate the operation of a roulette wheel, by rotating the display of the wheel, and cause an image of a roulette ball to spin around the track until it settles on one of the wedge shaped spaces in the ring 4.

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Between the two arrays just mentioned, is a matrix 32 consisting of an array of spaces, three spaces wide by twelve spaces long, with a further triangular space forming an apex for the matrix, bearing the digit '0'. The spaces of the matrix 32 are numbered consecutively from the top left corner from 1 to 36, and are coloured  
5 alternately red and black, to match the colours of the same numbered spaces in the circle 3. These spaces may be embodied as press buttons, touch screens, or operated by mouse controlled cursor, or stylus or point-and click light pencil operated switches to place one or more bets.

When the 'spin' button 30 is activated, the apparatus functions as a roulette  
10 simulator as already described. The outcome when the virtual ball has come to rest is then assessed by a computer or microprocessor in the apparatus, by comparison with the bets laid. That is, is the space on which the ball has settled red or black? Is the related number odd or even? Does the related number match any of the wagers laid? If any of the wagers made match the outcome, then winnings are calculated in  
15 accordance with criteria embodied in a mathematical formal, and the winnings displayed on the win window 27, and added to the credit total displayed at window 28.

The player may then cash all or part of his winnings, or carry on playing.

If instead of finishing on a red or black number space, the virtual ball  
20 terminates in one of the blue 'star' spaces (12), a bonus game is awarded, and a differentially coloured simulated ball is launched, as the wheel is spun again. This ball is preferably gold in colour, as opposed to the first ball which is a silvery colour, similar to a steel ball.

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A win is produced by this bonus game only if the simulated gold ball lands on one of the blue slots, in which case, a high value prize is offered.

The zero space 11, is either offered as a valid bet option, or is a void number whereby all bets lose, including those on colours and odds/evens.

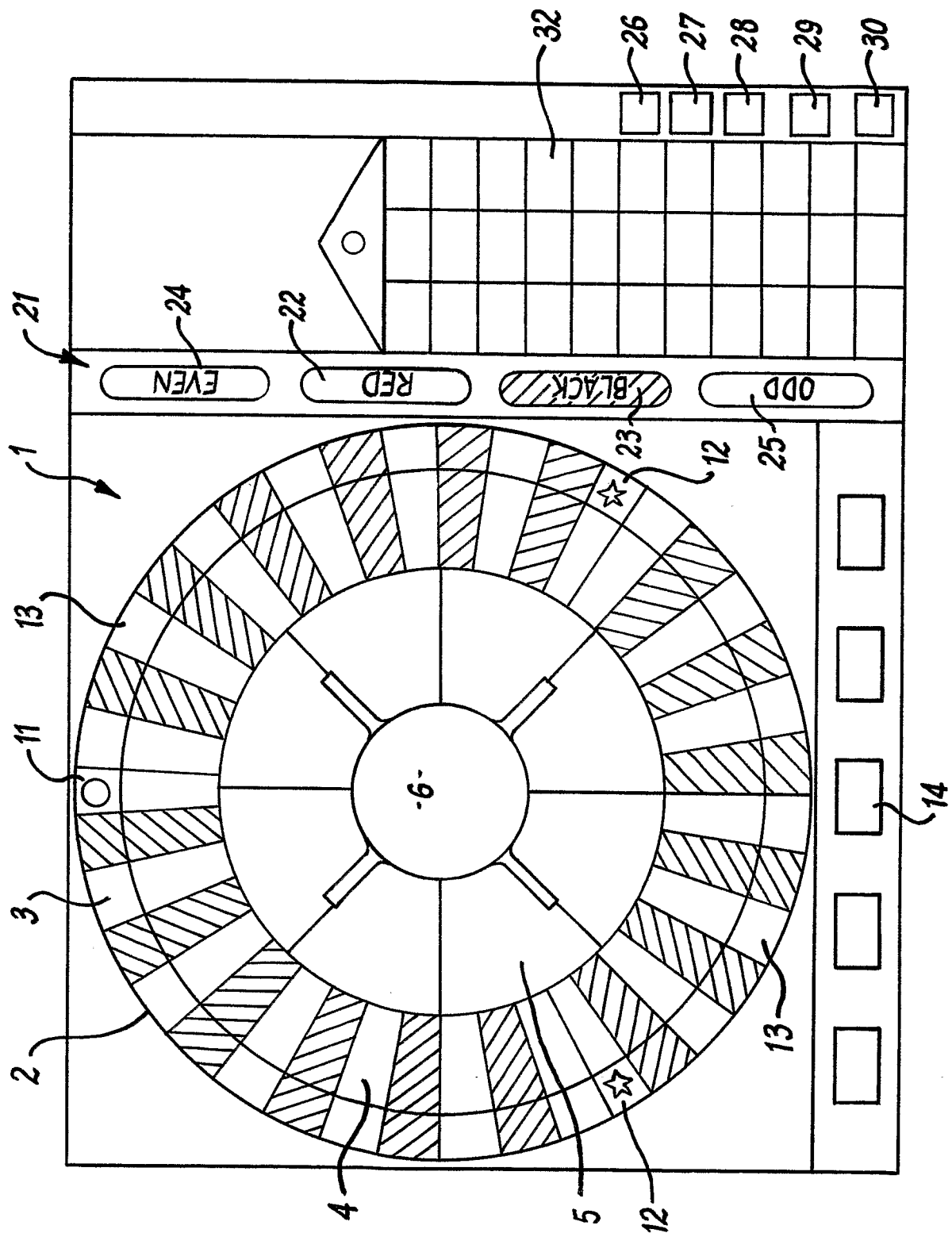
CLAIMS

1. Amusement or gaming apparatus adapted to simulate a roulette based game, comprising a real or simulated roulette wheel, having number spaces each  
5 providing a station to halt a real or simulated ball, and differentially coloured in first and second colours, and means for enabling bets to be placed in relation to any selected number space, or colour, characterised in that one or more extra spaces are provided, and in that the apparatus is arranged so that should the ball halt in said one, or one of said, extra space or spaces, access is  
10 given to a bonus game.
2. Apparatus according to claim 1, wherein means are provided, activatable by access to the bonus game, to enable a second, differentially coloured, real or simulated ball to be projected onto the roulette wheel and come to rest in a randomly determined number space.
- 15 3. Apparatus according to claim 1 or 2, wherein the one or more extra spaces are differentially coloured, in a third colour.
4. Apparatus according to any preceding claim wherein two such extra spaces and a 'zero' space are located at equispaced intervals around the roulette wheel.
- 20 5. Apparatus according to any preceding claim comprising control means for operating the roulette or roulette simulating game and for operating the bonus game, the control means including means for controlling a display simulating the action of the game, and enabling the trajectory and randomly determined end point of the respective balls to be displayed.



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6. Apparatus according to claim 5 wherein the control means includes means operable in the bonus game to either provide a 'free' game, and to provide a prize in the event of a win in the bonus game which is a multiple of the accumulated winnings.
- 5 7. Apparatus according to any preceding claim which has a display featuring a roulette wheel including the extra space or spaces, and a matrix of numbers disposed in arrays to each lateral side of the display, the display being adapted to allow selection of numbers and placement of wagers by interactive means.
8. Apparatus according to claim 7 wherein the interactive means comprise a  
10 cursor and mouse.
9. Apparatus according to claim 7 wherein the interactive means comprise embodying the arrays of the matrix of numbers as touch screens.

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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB2007/000018

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. A63F5/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
A63F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/07482 A (TUMANOV PAVEL N [KZ]) 26 February 1998 (1998-02-26)	1
Y	abstract; figures 1,2 -----	2-9
X	US 5 553 851 A (MALAVAZOS ALEX [US] ET AL) 10 September 1996 (1996-09-10)	1
Y	figures 1,2 -----	2-9
Y	US 2005/236767 A1 (PARSADAIAN CHRISTINE [US] ET AL) 27 October 2005 (2005-10-27) paragraph [0026] -----	2-9
Y	US 2002/167126 A1 (HERMAN DE RAEDT PETER WOLFGANG [US] ET AL) 14 November 2002 (2002-11-14) claims 1-6 -----	2-9

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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- \*P\* document published prior to the international filing date but later than the priority date claimed

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Name and mailing address of the ISA/  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Shmonin, Vladimir

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9807482	A	26-02-1998	NONE	
US 5553851	A	10-09-1996	NONE	
US 2005236767	A1	27-10-2005	NONE	
US 2002167126	A1	14-11-2002	NONE	