(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 March 2002 (14.03.2002)

PCT

(10) International Publication Number
WO 02/21457 A1

(51) International Patent Classification[7]: G07C 15/00, A63F 3/08

(21) International Application Number: PCT/EP01/09994

(22) International Filing Date: 29 August 2001 (29.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0021636.6 4 September 2000 (04.09.2000) GB
0030362.8 13 December 2000 (13.12.2000) GB

(71) Applicant *(for all designated States except US)*: **ROKE MANOR RESEARCH LIMITED** [GB/GB]; Roke Manor, Old Salisbury Lane, Romsey, Hants SO51 0ZN (GB).

(71) Applicant and
(72) Inventor: **WEBB, Nicholas** [GB/GB]; Hole Farm Cottage, Bodle Street Green, Herstmonceux, East Sussex BN27 4QJ (GB).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **LOCKHART, Peter** [GB/GB]; 24 Grayling Mead, Romsey, Hants SO51 7RU (GB).

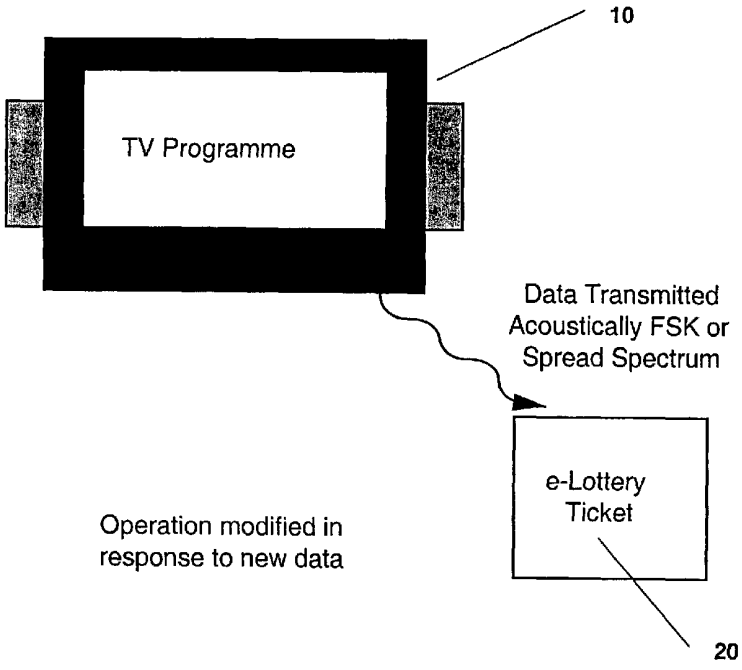
(74) Agents: **NEILL, Andrew** et al.; Intellectual Property Department, Siemens House, Oldbury, Bracknell, Berkshire RG12 8FZ (GB).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,

[Continued on next page]

(54) Title: ELECTRONIC LOTTERY TICKET



(57) Abstract: An electronic lottery ticket adapted to receive a wireless signal from a broadcast terminal, said wireless signal containing information pertinent to a lottery draw, comprising means to compare said information with ticket specific parameters and including indicator means to allow the results of said comparison to be signalled to the ticket owner. The signal can be an acoustic signal. The broadcast terminal may be a television, radio or Internet terminal.

WO 02/21457 A1

CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

ELECTRONIC LOTTERY TICKET

The present invention relates to a novel form of lottery ticket. The invention allows a lottery ticket to be activated so as, for example, to signal to the owner the results of the draw and to allow automatic indication of the degree of success on that particular ticket – e.g. indicate a win.

The invention comprises an electronic lottery ticket adapted to receive a wireless signal from a broadcast terminal, said wireless signal containing information pertinent to a lottery draw, means to compare said information with ticket specific parameters and including indicator means to allow the results of said comparison to be signalled to the ticket owner.

In a preferred embodiment the wireless signal is an acoustic signal. This may be sent from a television which broadcasts a television program. A broadcast signal sent to the television would include acoustic data to be transmitted by sound by the television. Other terminals for transmission of the signal may be radio, Internet, point of sale, ATM, etc.

The indicator means may be visual and/or audible.

The signal may also be transmitted by means of visual or infra red light, or radio frequency (rf).

The ticket specific parameters are those selected by the owner of the lottery ticket, generally speaking the selected numbers. These are previously input to a ticket at the point of sale terminal or be input, irreversibly, by the purchaser.

Figure 1 illustrates an embodiment of the invention.

An acoustic signal 2 is sent from the television set 1 to an electronic lottery ticket 3, during transmission of a TV program (the television broadcast signal from the transmitter includes a modulated acoustic signal). This signal comprises data pertinent to a lottery draw and which is modulated by acoustical FSK. The electronic lottery ticket has microphone means to receive the acoustic signal and process the lottery data.

The lottery data is compared with lottery numbers which are specific to the electronic lottery ticket. These numbers are the numbers selected by the owner of the electronic ticket and are inputted in electronic format at the point of sale by a terminal. The electronic lottery ticket comprises additionally means to compare these pre-selected numbers with the lottery data transmitted by the acoustic signal. The ticket also includes a visual indicator means is activated showing a win.

It would be clear to a person skilled in the art, that there are a number of various embodiments and variations which would be included in the scope of the invention.

There are a number of possibilities of indicating the results of the comparison. The indicator means may be audible, such as playing a tune, or visual such as an LED or LCD displaying the number of matching numbers etc.

The electronic lottery ticket has encoded thereon a particular selection of numbers. These are previously input onto the e-lottery ticket by suitable

means usually at the point of sale. In the simplest form the numbers may be stored on a ROM chip. This may be done at the point of sale or the ticket may have means to irreversibly select numbers such that effectively the electronically stored numbers can be inputted manually by the buyer.

In the example the acoustic data containing information pertinent to the winning number is transmitted by a television broadcast. However any appropriate broadcast or suitable terminal may be used. The acoustic signal may, alternatively to a television signal, be a radio signal or any broadcast signal and the terminal which transmits the acoustic signal may be a television, radio, point-of-sale terminal, Internet terminal, mobile/land telephone ATM machine. Thus the acoustic signal may be sent via Internet wires or telephone wires or wirelessly in appropriate form e.g. modulated with the signal, and the corresponding terminal would convert this into as acoustic signal.

The acoustic signal may be encoded modulate before being sent by the terminal, by suitable means e.g. FSK, mpeg, spread spectrum, chirped signal, frequency hopping etc.

They may also be used in the acoustic signal itself for security purposes, the e-lottery ticket will also be supplied with an electronic PIN number.

The electronic lottery ticket may not need to be activated by an acoustic signal from the terminal. Other forms of wireless signals may also be used to activate/communicate with the electronic lottery ticket. The terminal may communicate by means of light (visual or infra red or rf) with the ticket and various forms of implementation would be clear to the skilled person. In a

particularly referred embodiment of the invention where the terminal includes a CRT e.g. a television, the information is passed to the ticket by means of a 'flashed' screen.

Also modulating dipole or"blue tooth" technology may be utilised.

CLAIMS

1. An electronic lottery ticket adapted to receive a wireless signal from a broadcast terminal, said wireless signal containing information pertinent to a lottery draw, means to compare said information with ticket specific parameters and including indicator means to allow the results of said comparison to be signalled to the ticket owner.

2. An electronic lottery ticket as claimed in claim 1 wherein said indicator means is visual or audible.

3. An electronic lottery ticket as claimed in claim 1 or 2 wherein said broadcast terminal is a television, radio, Internet terminal.

4. An electronic lottery ticket wherein said wireless signal is an acoustic signal.

5. An electronic lottery ticket as claimed in claim 1wherein said signal is transmitted by means of visual or infra red light, or radio frequency.

6. An electronic lottery ticket as claimed in claim 5 wherein signal is transmitted by "flashed" screen, blue tooth, or modulating dipole means.

7. A method of providing for a lottery draw comprising the steps of:
a) providing an electronic lottery ticket adapted to receive a wireless signal from a broadcast terminal, said wireless signal containing information pertinent to a lottery draw;

b) transmitting said signal to said lottery ticket;

c) comparing said information with ticket specific parameters; and

d) indicating the results of said comparison to be signalled to the ticket owner.

8. A method as claimed in claim 7 wherein the ticket specific parameters are inputted previously at the point of sale.

9. A method as claimed in claim 7 wherein the ticket specific parameter are irreversibly input into the ticket by the owner.

10. A method as claimed in claims 7 to 9 wherein the signal is an acoustic signal.

11. A method as claimed in any of claims 7 to 10 wherein the broadcast terminal is a television, radio or Internet terminal.

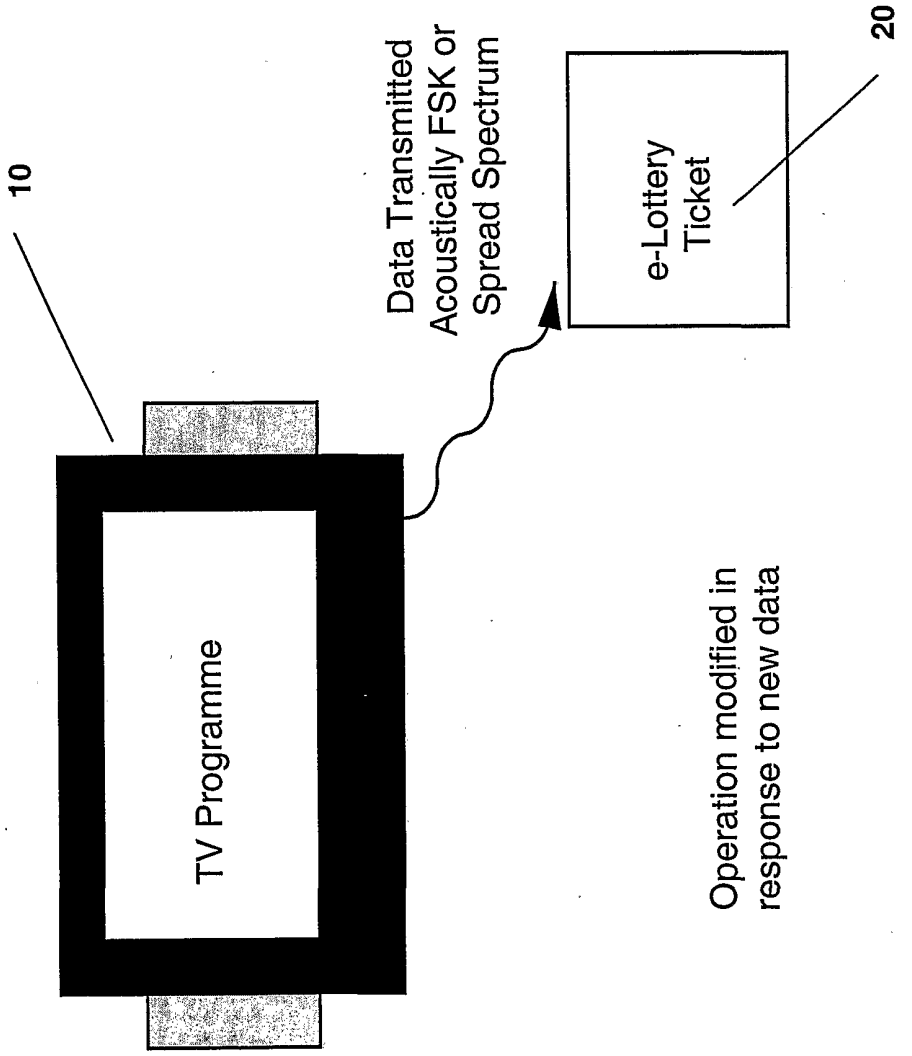

10
TV Programme
Data Transmitted
Acoustically FSK or
Spread Spectrum
e-Lottery
Ticket
20
Operation modified in
response to new data

Fig. 1

INTERNATIONAL SEARCH REPORT

Int nal Application No
PCT/EP 01/09994

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G07C15/00 A63F3/08

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)
IPC 7 G07C

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 91 09655 A (KOZA JOHN R) 11 July 1991 (1991-07-11) abstract; claims 10,11; figures page 8, line 1 -page 10, line 12	1-11
X	WO 94 22113 A (SCHNEIDER PHILIPP J) 29 September 1994 (1994-09-29) abstract; figures page 6, line 11 -page 8, line 30 page 2, line 17 - line 29	1-11

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

☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
17 January 2002	25/01/2002

Name and mailing address of the ISA	Authorized officer
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	Buron, E

1

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int ional Application No
PCT/EP 01/09994

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9109655 A	11-07-1991	US 5112050 A	12-05-1992
		AU 7158291 A	24-07-1991
		WO 9109655 A1	11-07-1991
		US 5069453 A	03-12-1991
WO 9422113 A	29-09-1994	DE 9304673 U1	22-07-1993
		DE 9316734 U1	13-01-1994
		EP 0617386 A1	28-09-1994
		AT 161345 T	15-01-1998
		DE 59404830 D1	29-01-1998
		WO 9422113 A1	29-09-1994
		EP 0691014 A1	10-01-1996