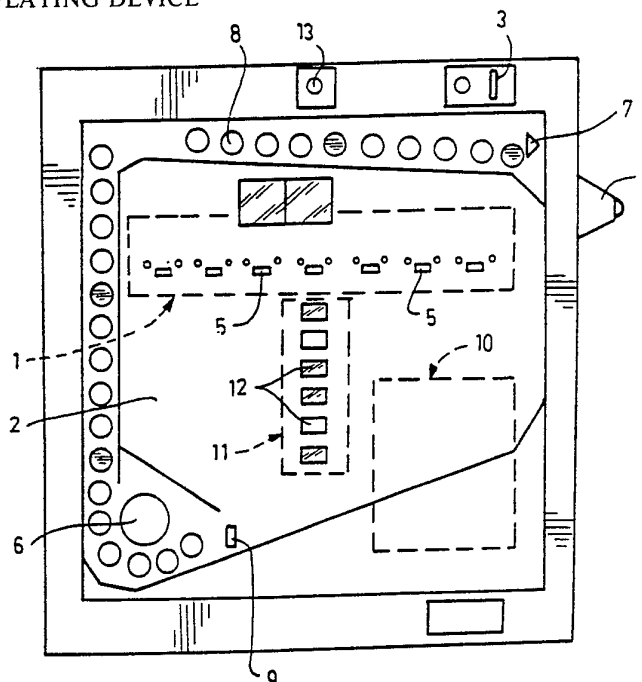




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁴ : G07F 17/32	A1	(11) International Publication Number: WO 89/12876 (43) International Publication Date: 28 December 1989 (28.12.89)
(21) International Application Number: PCT/FI89/00113 (22) International Filing Date: 14 June 1989 (14.06.89) (30) Priority data: 883042 23 June 1988 (23.06.88) FI (71) Applicant (for all designated States except US): RAHA-AUTOMAATTIYHDISTYS [FI/FI]; Keilaranta 4, SF-02150 Espoo (FI). (72) Inventors; and (75) Inventors/Applicants (for US only) : HÄMÄLÄINEN, Olli [FI/FI]; Itätuulenkujä 5 B 23, SF-02100 Espoo (FI). PI-RI, Kauko [FI/FI]; Raivio, SF-02550 Evtskog (FI). (74) Agent: OY KOLSTER AB; Stora Robertsgatan 23, P.O. Box 148, SF-00121 Helsinki (FI).		(81) Designated States: AT, AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CF (OAPI patent), CG (OAPI patent), CH, CH (European patent), CM (OAPI patent), DE, DE (European patent), DK, FI, FR (European patent), GA (OAPI patent), GB, GB (European patent), HU, IT (European patent), JP, KP, KR, LK, LU, LU (European patent), MC, MG, ML (OAPI patent), MR (OAPI patent), MW, NL, NL (European patent), NO, RO, SD, SE, SE (European patent), SN (OAPI patent), SU, TD (OAPI patent), TG (OAPI patent), US. Published <i>With international search report.</i>

(54) Title: AN ARRANGEMENT FOR A GAME PLAYING DEVICE



(57) Abstract

An arrangement for a game playing device comprising a game playing apparatus which controls a prize delivering machinery (10), a feeding device (7) for a token (8) for starting the game playing apparatus against a payment, and a tuning means (11) controlling the prize delivering machinery. The tuning means improves the odds and the chances of winning a prize from a normal state in response to the operation of the game playing apparatus. In order that the tuning means could be restored to the normal state by the player, the game playing device comprises a stop switch (13) which influences the feeding device for starting the game playing apparatus without payment and which is arranged to control the tuning means in such a manner that the tuning means is restored to the normal state when the operation of the game playing device does not affect the tuning means or the prize delivering machinery, so that the player does not win a prize.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FI	Finland	ML	Mali
AU	Australia	FR	France	MR	Mauritania
BB	Barbados	GA	Gabon	MW	Malawi
BE	Belgium	GB	United Kingdom	NL	Netherlands
BF	Burkina Fasso	HU	Hungary	NO	Norway
BG	Bulgaria	IT	Italy	RO	Romania
BJ	Benin	JP	Japan	SD	Sudan
BR	Brazil	KP	Democratic People's Republic of Korea	SE	Sweden
CF	Central African Republic	KR	Republic of Korea	SN	Senegal
CG	Congo	LJ	Liechtenstein	SU	Soviet Union
CH	Switzerland	LK	Sri Lanka	TD	Chad
CM	Cameroon	LU	Luxembourg	TG	Togo
DE	Germany, Federal Republic of	MC	Monaco	US	United States of America
DK	Denmark	MG	Madagascar		
ES	Spain				

An arrangement for a game playing device

This invention relates to an arrangement for a game playing device comprising

- 5 - a game playing apparatus;
- a prize delivering machinery controlled by the game playing apparatus;
- a feeding device for a token for starting the game playing apparatus; and
- 10 - a tuning means controlling the prize delivering apparatus so that the odds and/or the chances of winning a prize are improved from a normal state in response to the operation of the game playing apparatus.

15 There is a great variety of prior art game playing devices in which the player can start the game playing apparatus with a coin or the like token usually in order to play the game once. The game playing apparatus may be a conventional slot machine, in which
20 the player launches a coin into the play panel, trying to pass it through winning ports, or a display game known as a fruit game, in which the object is to make rotating drums stop in a position such that the drums together form a predetermined pattern.

25 In order to make the playing apparatuses more interesting and attractive, it is known to add tuning means to the game playing devices for temporarily increasing the amount to be paid out, or extra prizes or bonuses can be connected to the game. The operation of
30 the tuning means may be controlled solely by the game playing apparatus, or the tuning means may be such as to allow the player himself to influence its operation. In a slot machine, for instance, the tuning means may be arranged to give extra prizes or to im-
35 prove the odds in proportion as the coin passes

through one or more prize-winning ports, so that the player gets an extra prize or bonus after the coin has passed through such a prize-winning port a predetermined number of times. In display games, the tuning means may be arranged to influence the rotation of the wheels so that the player is able to lock one or more wheels in advance in a certain position in order to increase the chances of winning a prize. After the achievement of the tuning state required by the tuning means, the tuning means is released, thus giving the player the advantage offered by the tuning state, whereafter the tuning means is restored to the normal state for the next tuning.

In game playing devices comprising this kind of tuning means, it is possible that the player does not manage to get the advantageous tuning state released, when he, for instance, runs out of coins or wishes to stop the playing for some other reason before he has been able to benefit from the improved odds or other advantages offered by the tuning state. The tuning state will thereby benefit the next player, who has not deserved it. It is also possible that when the player goes to exchange coins, somebody else starts to play the game and manages to get the tuning state released to the preceding player's disadvantage.

The object of the present invention is to provide a game playing device which avoids the above-mentioned drawback and in which the player can restore the tuning means to the normal state. This object is achieved by means of a game playing device according to the invention, which is characterized in

- that the game playing device comprises a stop switch influencing the feeding device for starting the game playing apparatus; and
- that the stop switch is arranged to control

the tuning means in such a manner that the tuning means is restored to the normal state when the game playing apparatus does not influence the tuning means or the prize delivering machinery.

5 The invention is based on the idea that the player is given still another opportunity to try to release the tuning state or to benefit from an advantageous tuning state without payment, whereby he simultaneously restores the tuning means to the normal
10 state when he does not win in the game. In this way, the player is inveigled to restore the tuning means to the normal state himself. As a reward, he gets a free game and still another opportunity to benefit from the tuning state of the game. The player can, of course,
15 press the stop switch whenever he wants and play the free game and benefit from the advantages possibly offered by the prevailing tuning state. Thereafter he may continue either from the normal state of the tuning means or after having won a prize from the re-
20 spective tuning state. In this way, the game is considerably more interesting as it is ensured that the player need not leave any undeserved benefit to the next player, if he does not want to.

 The invention will be described in greater detail in the following with reference to the attached drawing, wherein

 Figure 1 is a front view of a slot machine in which the arrangement according to the invention is applied; and

30 Figure 2 shows a block diagram of the operation of the arrangement.

 The game playing device shown in Figure 1 of the drawing comprises a slot machine 1 comprising a play panel 2, a coin insert 3, a coin launching device
35 4, actuating means 5 detecting the passing of a coin

therethrough, a coin insert device 6, a feeding device 7 for passing a coin 8 into the launching device, and a sensing means 9 for detecting the descending of the coin. A game playing device of this type is described in the Applicant's Finnish Patent Specification 63 123.

When playing the game, the player tries to launch a coin from the launching device so that it passes through one of the actuating means in the play panel, whereby he wins a prize associated with each particular actuating means. For this purpose, the game playing device further comprises a prize delivering machinery 10 shown only schematically. The actuating means control the prize delivering machinery only when a coin passes through one of the actuating means, whereas no prize is delivered when the coin goes past the actuating means or drops down between them.

The game playing device further comprises a tuning means 11 which in this particular case is represented by six prize increasing lamps 12. The tuning means may operate in such a manner that whenever a coin passes through one of the actuating means, one of the lamps is lit, and after all the lamps have been lit, the player gets an extra prize. Alternatively, the operation may be such that when the coin passes through a predetermined actuating means, such as the middlemost actuating means, one of the lamps is lit to indicate improved odds. When the coin passes through said one of the actuating means, the prize won by the player is the higher the greater the number of the lit lamps is. This makes the player more eager to go on with the game. After all the lamps have been lit, and the player manages to pass a coin through one of the actuating means, the tuning means is restored to its normal state, and the lamps go out.

According to the invention, the game playing device is provided with a press-button type stop switch 13 which is connected to control the operation of the coin feeding device 7 so that the feeding machinery allows one coin in a sequence of coins to pass into the launching device 4 when the stop switch is pressed. The stop switch is also connected to influence the operation of the tuning means so that the tuning means 11 is restored to its normal state (e.g., all the lamps 12 have gone out), if said coin, when launched from the launching device, passes between the actuating means 5, that is, does not lead to any kind of prize or advantage. If the coin, instead, passes through one of the actuating means, the stop switch does not any longer influence the tuning means, so that the tuning means operates normally. Such an operation can be achieved by the coaction of the sensing means 9 sensing the descending of the coins and the actuating means 5. The stop switch is thereby connected to activate the sensing means so that it applies an impulse to the tuning means in order to restore it to its normal state if no impulse "cancelling" the restoration is received at the tuning means from any one of the actuating means.

Accordingly, the player gets a free game (coin) by pressing the stop switch, whereafter the tuning means is restored to the normal state without affecting the prize delivering machinery if the coin does not pass through any one of the actuating means, or continues its operation according to its programme if the coin passes through one of the actuating means. In the former case, the player can continue the game normally or, if he wishes, press again the stop switch so as to get another free game.

The drawing and the description related thereto

are only intended to illustrate the idea of the invention. In its details, the arrangement according to the invention may vary within the scope of the claims. Accordingly, the arrangement can be applied to game
5 playing apparatuses of some other type as well, such as so called fruit games, whereby the stop switch gives the player a free game (rotation of wheels) when he wants to stop playing the game. The stop switch is thereby connected to release all locked wheel-locking
10 press buttons, if the free game does not result in such positions of the wheels that the combination of symbols so obtained would give a prize or other advantage.

Claims:

1. An arrangement for a game playing device comprising
- 5 - a game playing apparatus (1);
- a prize delivering machinery (10) controlled by the game playing apparatus;
- a feeding device (7) for a token (8) for starting the game playing apparatus; and
- 10 - a tuning means (11) controlling the prize delivering apparatus so that the odds and/or the chances of winning a prize are improved from a normal state in response to the operation of the game playing apparatus;
- 15 c h a r a c t e r i z e d i n
- that the game playing device comprises a stop switch (13) influencing the feeding device (7) for starting the game playing apparatus; and
- that the stop switch is arranged to control
- 20 the tuning means (11) in such a manner that the tuning means are restored to the normal state when the game playing apparatus does not influence the tuning means or the prize delivering machinery (10).
2. An arrangement according to claim 1, wherein
- 25 the game playing apparatus (1) comprises a play panel (2) defining an area of movement for the coins or the like tokens (8) and comprising actuating means (5) disposed in the area of movement and detecting the passing of tokens therethrough, and a launching device
- 30 (4) at the side of the area of movement for launching the tokens into the area of movement, the actuating means controlling the tuning means (11), c h a r a c t e r i z e d i n that the stop switch (13) is arranged to feed a token (8) into the launching device
- 35 (4) and to restore the tuning means (11) to the normal

state after said token has gone past the actuating means without passing through any one of them.

3. An arrangement according to claim 2, characterized in that the stop switch
5 (13) is connected to the feeding device (7) for passing a single token into the launching device when the stop switch is activated.

4. An arrangement according to claim 2 or 3, wherein a sensing means (9) sensing the descending of
10 the tokens (8) is disposed in the play panel below the actuating means (5), characterized in that the actuating means (5) detecting the passing of the coin therethrough and the sensing means sensing the descending of the coin are connected to influence
15 the tuning means (11) so that the activation of the stop switch (13) causes the tuning means to be restored to the normal state when only the sensing means influences the tuning means after the token fed by the stop switch has passed through the sensing means.

1/2

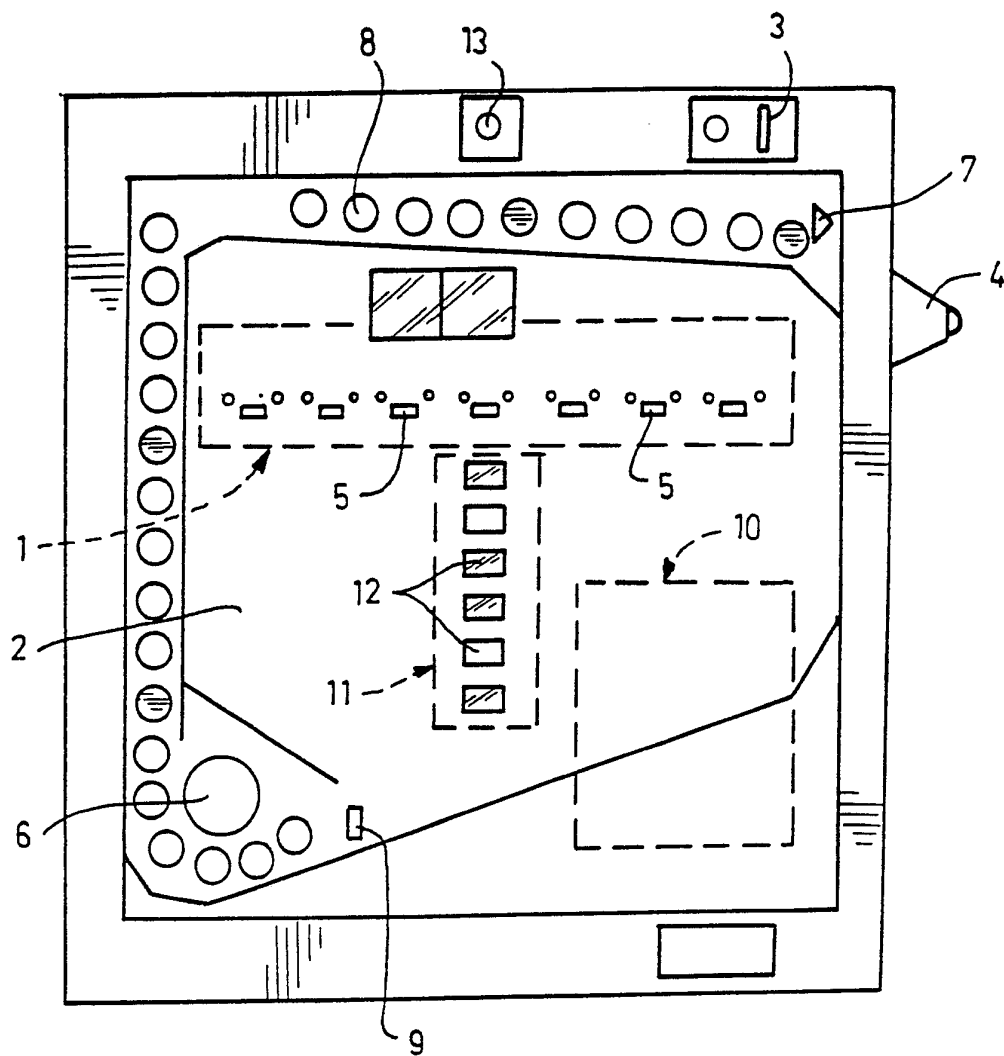


FIG. 1

2/2

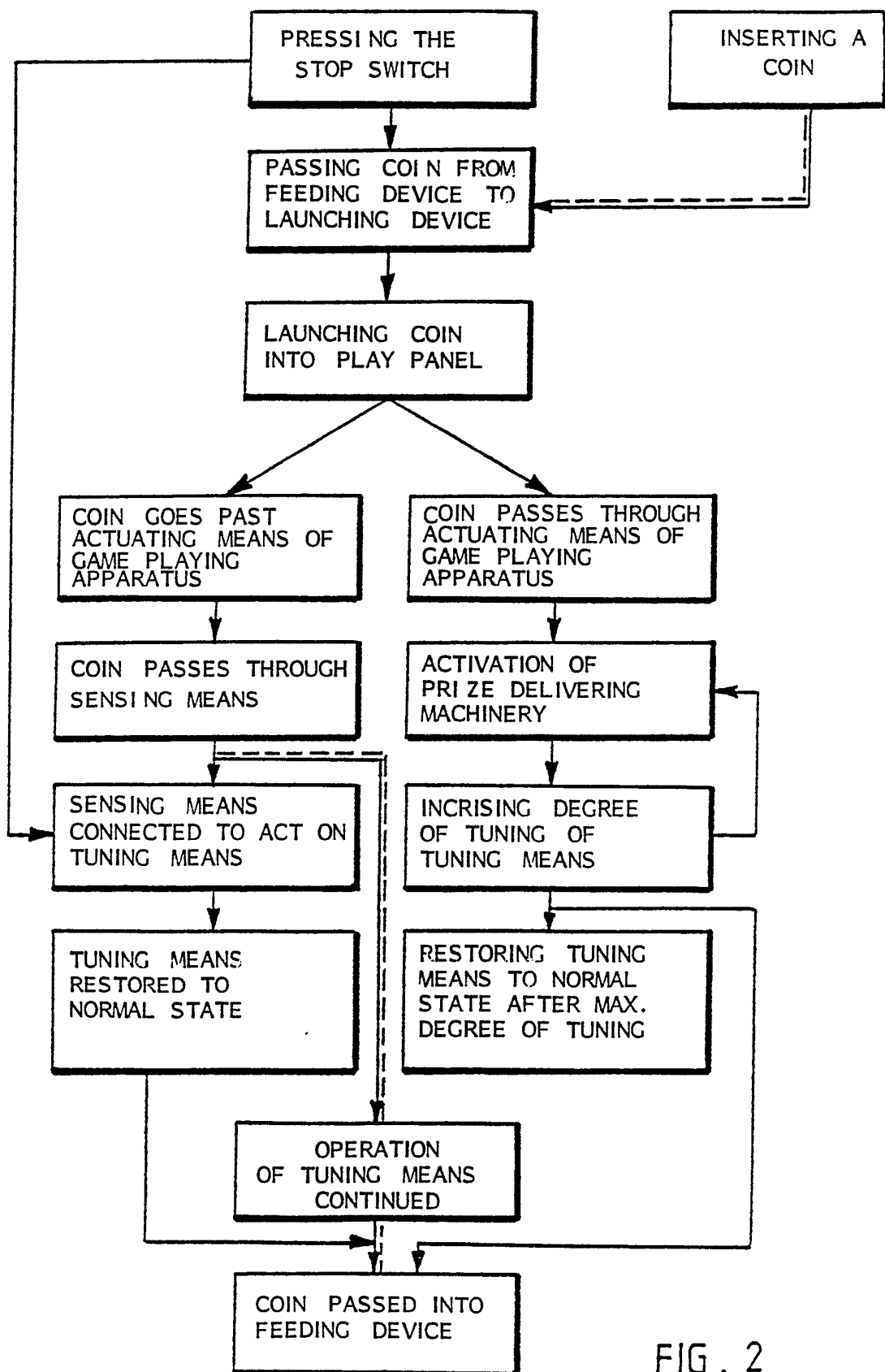



FIG. 2

INTERNATIONAL SEARCH REPORT

International Application No PCT/FI 89/00113

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC4: G 07 F 17/32		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
IPC4	G 07 F	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
SE, NO, DK, FI classes as above		
III. DOCUMENTS CONSIDERED TO BE RELEVANT ⁹		
Category ⁹	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
A	WO, A1, 82/04340 (RAHAAUTOMAATIIYHDISTYS) 9 December 1982, see abstract --	1
A	WO, A1, 88/03299 (SALINA A/S) 5 May 1988, see abstract -- -----	1
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>¹⁰ Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"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</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"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.</p> <p>"A" document member of the same patent family</p> </div> </div>		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
1989-09-19	1988 -09- 27	
International Searching Authority	Signature of Authorized Officer	
Swedish Patent Office	 Hans Bandelin	