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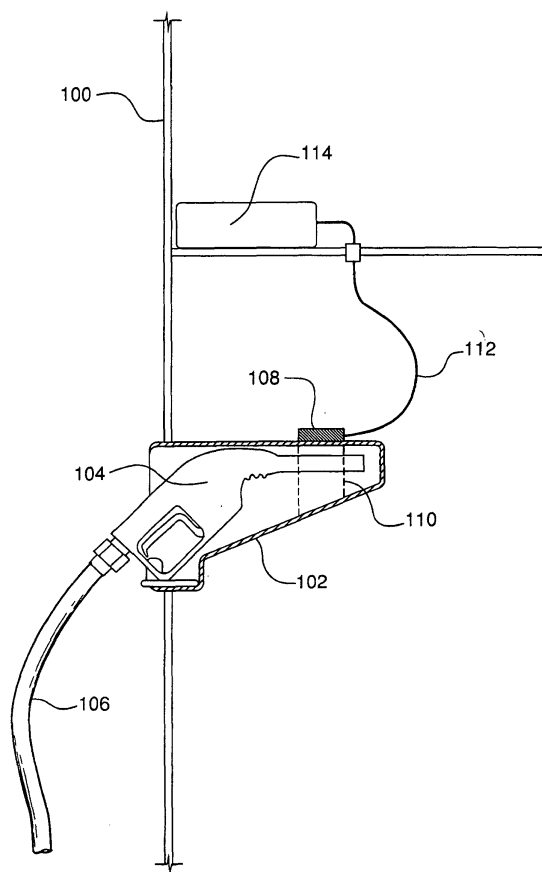
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(54) **Fuel dispenser activation method and apparatus**

(57) A fuel dispenser (100) includes a non-mechanical switch that detects whether a fueling nozzle (104) is positioned inside or outside of a nozzle boot (102). When the non-mechanical switch (114) detects that the fueling nozzle is removed from the nozzle boot, the non-mechanical switch generates a signal to activate a fuel dispensing transaction. When the non-mechanical switch detects that the fueling nozzle is replaced in the nozzle boot, the non-mechanical switch generates a signal to terminate the fuel dispensing transaction.



**Figure 3**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 04 25 1629

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 6 149 033 A (POLESHUK EDWARD S) 21 November 2000 (2000-11-21) * column 1, line 58 - column 2, line 18 * * column 5, line 12 - line 35 * -----	1-16, 18-20	B67D5/04 B67D5/12
X	US 5 110 010 A (SMITH LEON B) 5 May 1992 (1992-05-05)  * column 3, line 19 - column 4, line 1; figure 1a *	1,3, 8-11,13, 18-20	
X	DE 42 02 075 A (AUDI NSU AUTO UNION AG) 29 July 1993 (1993-07-29) * column 2, line 28 - line 41; figure 1a *	1,8-11, 19,20	
X	US 5 506 570 A (SCOTT PAUL B ET AL) 9 April 1996 (1996-04-09)  * column 2, line 57 - column 3, line 2; figure 1a *	1,5, 9-11,15, 19,20	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B67D
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>13 October 2004</b>	Examiner <b>Desittere, M</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 25 1629

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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13-10-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6149033	A	21-11-2000	NONE	
US 5110010	A	05-05-1992	NONE	
DE 4202075	A	29-07-1993	DE 4202075 A1	29-07-1993
US 5506570	A	09-04-1996	NONE	