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(54) Title: PNEUMATIC PAINTBALL GUN

(57) Abstract: A pneumatic assembly preferably includes a sealing member disposed between a compressed-gas storage area and a compressed gas releasing area. A piston rod is preferably arranged in communication with the sealing member and disposed longitudinally in the pneumatic assembly extending between the compressed gas storage and compressed gas releasing areas. One or more vent channels are preferably formed in the piston rod, with one or more ribs arranged longitudinally through or between the vent channels. The ribs are preferably configured to maintain the sealing member within a sealing member retaining groove while compressed gas is being released from the compressed gas storage area to the compressed gas releasing area. A grip mounted circuit board arrangement can also be provided wherein a circuit boards is configured to securely mount within one or more slots arranged in a grip frame of a paintball gun. The circuit board may include a solenoid valve and a trigger-actuated switch arranged on the circuit board. The paintball gun can further include an interchangeable external shell for housing the pneumatic assembly.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/38476

A. CLASSIFICATION OF SUBJECT MATTER

IPC: F41B 11/00(2006.01)

USPC: 124/73

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)

U.S. : 124/73

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 3,465,742 (HERR) 09 Sept 1969 (09.09.1969), whole document.	1-21, 23 and 24 ----- 22
X --- Y	US 20040255923 A1 (CARNALL) 23 DEC 2004 (23.12.2004), Figs. 1 and 2.	1-21 and 24 ----- 22
X	US 20050115554 A1 (JONES) 02 June 2005 (02.06.2005), whole document.	1-21 and 24
X --- Y	US 6,763,822 (STYLES), 20 June 2004 (20.06.2004), whole document.	28 ----- 29

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

☐ See patent family annex.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,439,217 (SHIH) 27 Aug 2002 (27.08.2002), whole document	25-27
Y	US 5,119,715 (PORTER, JR. et al) 09 June 1992 (09.06.1992), whole document.	25-27