

Title (en)

BLADDER WATER GUN, IMPROVED BLADDER AND NOZZLE

Title (de)

WASSERPISTOLE MIT VERBESSERUNGEN AN BLASE UND DÜSE

Title (fr)

PISTOLET A EAU A POCHE EXTENSIBLE, POCHE EXTENSIBLE AMELIOREE ET GICLEUR

Publication

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Application

EP 97932463 A 19970627

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- US 67293396 A 19960628

Abstract (en)

[origin: WO9800214A1] An expandable bladder toy water gun (1) is provided. It includes a main housing (3) having a barrel (9), a water ejection nozzle (11), a handle (5), a trigger (7), a water storage tank (33), a hand pump (45) as well as an inflatable bladder (13) connected to the main housing (3). The pump (45) is connected to both the tank (33) and the bladder (13). There is a bladder release valve (31) with an upstream side connected to the bladder (13) and a downstream side connected to the nozzle (11) for water ejection when the trigger (7) is pulled. The elasticity of the bladder (13) is used as the motive force for liquid ejection. The bladder is a tubular member which has a section (91) of weakened elastic strength relative to the remainder of the member. In one embodiment, the bladder has a variable diameter, larger at its front end and smaller at its back end. In another embodiment, the bladder has a constant diameter with a wall thickness gradient. The nozzle (11) includes a turbulence control member (213) for enhanced laminar flow ejection which control member has a plurality of linear stream guidance walls.

IPC 1-7

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IPC 8 full level

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