

Title (en)  
Nozzle attachment for an adhesive spray gun.

Title (de)  
Düsenvorsatz für eine Klebepistole.

Title (fr)  
Adaptateur d'une tuyère pour un pistolet à adhésif.

Publication  
**EP 0367985 A2 19900516 (EN)**

Application  
**EP 89118357 A 19891004**

Priority  
US 26800288 A 19881107

Abstract (en)  
An apparatus for spraying heated hot melt adhesive in elongated strands or fibers in a controlled, spiral pattern upon a substrate comprises a spray gun (10) having a nozzle (14) formed with an adhesive delivery passageway (56) and an air delivery passageway (94) both of which terminated at the base of the nozzle (14). A nozzle attachment (18) in the form of a one-piece annular plate is mounted to the base of the nozzle (14) by a cap (62). The annular plate (18) is formed with a throughbore (110) which receives hot melt adhesive from the adhesive delivery passageway (56) and ejects an adhesive bead through a nozzle tip (108) formed on the outer side of the plate (18) opposite the nozzle (14). An annular groove (112) formed in the outer side of the plate (18) facilitates drilling of air jets bores (118) therein at an angle relative to the throughbore and adhesive bead ejected therefrom. The air jet bores (118) receive pressurized air from the air delivery passageway (94) in the nozzle (14) and direct jets of pressurized air substantially tangent to the adhesive bead to form elongated adhesive fibers and to impart a spiral motion to the elongated fibers so that they are formed in a compact spray pattern for deposition onto a substrate.

IPC 1-7  
**B05B 7/16; B05C 5/04**

IPC 8 full level  
**B05B 7/06** (2006.01); **B05B 7/08** (2006.01); **B05B 7/16** (2006.01); **B05C 5/02** (2006.01); **B05C 5/04** (2006.01)

CPC (source: EP)  
**B05B 7/0861** (2013.01); **B05C 5/02** (2013.01); **B05C 5/0225** (2013.01)

Cited by  
EP1285699A1; CN112588519A; EP0865873A3; US5169071A; CN115301431A; DE19748908C1; DE102013101637B4; KR20030032475A; DE19757238C2; CN115502011A; DE19714029A1; DE19714029C2; EP0474155A3; DE4208884A1; US5510149A; USRE36534E; CN111992429A; US7524176B2; DE102013101637A1; WO2005107958A1; US7169228B2; WO9962642A1; WO9932233A1; WO2005107957A1; US7097710B2

Designated contracting state (EPC)  
BE DE ES FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0367985 A2 19900516; EP 0367985 A3 19900808; EP 0367985 B1 19950201**; AU 4275789 A 19900510; AU 620920 B2 19920227; CA 1316343 C 19930420; DE 68920950 D1 19950316; DE 68920950 T2 19950622; JP 2820740 B2 19981105; JP H02180658 A 19900713

DOCDB simple family (application)  
**EP 89118357 A 19891004**; AU 4275789 A 19891010; CA 614019 A 19890928; DE 68920950 T 19891004; JP 28807589 A 19891107