

Title (en)
INJECTION DEVICE WITH AUTOMATICALLY RETRACTABLE NEEDLE

Title (de)
INJEKTIONSVORRICHTUNG MIT AUTOMATISCH ZURÜCKZIEHBARER NADEL

Title (fr)
DISPOSITIF D'INJECTION AVEC AIGUILLE A RETRACTION AUTOMATIQUE

Publication
EP 1507566 A1 20050223 (EN)

Application
EP 03725413 A 20030516

Priority
• GB 0302132 W 20030516
• GB 0211294 A 20020517

Abstract (en)
[origin: WO03097133A1] An injection device has a needle which, when the device is operated, is first caused to project, then liquid is forced out through it, and finally the needle is automatically retracted. The needle extends forwardly from a capsule that can slide longitudinally within a barrel-like body, a relatively weak spring normally maintaining the capsule and needle retracted. A more powerful spring acts oppositely on a plunger formed by rod parts (27A, 27B) which, when released, shoots the capsule forward by acting on the liquid therein, and then forces the liquid out through the projecting needle. At the end of the forward stroke the plunger and capsule are decoupled and the weak spring returns the exhausted capsule and its needle to the retracted position. A lost motion connection provided by a piston (31) of the rod part (27A) acts as a damper in a cylinder (32) of the rod part (27B), to ensure that the full dose is ejected from the needle before decoupling occurs.

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IPC 8 full level
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CPC (source: EP)
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Citation (search report)
See references of WO 03097133A1

Cited by
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