

Title (en)
RETAINING DEVICE USING THE SURFACE TENSION OF A LIQUID, SWITCH PROVIDED WITH SUCH A DEVICE AND ITS APPLICATION IN MAGNETIC RELAYS

Publication
EP 0057130 A3 19820818 (FR)

Application
EP 82400095 A 19820119

Priority
FR 8101293 A 19810123

Abstract (en)
[origin: US4471190A] A drawback device to ensure the return of a moving part to its original position, after it has been moved away from it by another force. The existing method, involving an elastic mechanical component which acts as a spring, is replaced in this invention by a quantity of liquid, placed between the moving part and a fixed part, and remaining there through the effect of capillarity. When the moving part moves away from the fixed part, surface tension is created on the surface of the liquid, tending to draw the moving part back to its original position. Such devices are used in sealed miniaturized relays with mercury-wetted contacts.

IPC 1-7
H01H 1/08

IPC 8 full level
H01H 3/00 (2006.01); **H01H 1/08** (2006.01); **H01H 1/50** (2006.01)

CPC (source: EP US)
H01H 1/08 (2013.01 - EP US)

Citation (search report)
• [A] US 2309953 A 19430202 - HARRISON HENRY C
• [A] US 2288452 A 19420630 - HARRISON HENRY C
• [A] US 2473693 A 19490621 - POLLARD JR CHARLES E
• [A] DE 1257285 B 19671228 - SIEMENS AG
• [A] FR 2392485 A1 19781222 - OREGA CIRCUITS & COMMUTATION [FR]
• [A] US 3144533 A 19640811 - ERWIN DONATH

Cited by
FR2570543A1; FR2728037A1; WO9618040A1

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

DOCDB simple family (publication)
EP 0057130 A2 19820804; EP 0057130 A3 19820818; EP 0057130 B1 19850821; DE 3265486 D1 19850926; FR 2498689 A1 19820730; FR 2498689 B1 19840217; JP S57143213 A 19820904; US 4471190 A 19840911

DOCDB simple family (application)
EP 82400095 A 19820119; DE 3265486 T 19820119; FR 8101293 A 19810123; JP 873582 A 19820122; US 34162882 A 19820122