

Title (en)
RF latching connector with polymer spring

Title (de)
RF Verbinder mit Verriegelung und Kunststofffeder

Title (fr)
Connecteur RF à verrouillage avec ressort de polymère

Publication
EP 2028727 A1 20090225 (EN)

Application
EP 07114747 A 20070822

Priority
EP 07114747 A 20070822

Abstract (en)
This invention relates to an RF connector latching system. Some RF connectors are designed with a latching system to ensure that male and female connectors remain locked together to prevent accidental disconnection. With some connectors this locking system comprises a sprung loaded sleeve which requires forced axial movement to permit separation of the two connectors. The current design as shown in Fig 1 and 2 incorporates a wire formed compression spring trapped between two locking washers which allows forced movement in two axial dimensions permitting release of the mating connector at the extremities of movement. This sprung mechanism is difficult to assemble and inspect after assembly. This invention relates to an injection moulded spring as shown in Fig 5 which has a semi-circular form so that two springs can be easily assembled from each side of the connector as shown in Fig 4 and held in place with an injection moulded sleeve as shown in Fig 3 . The spring locates in two groves to lock to the inner body and outer latching sleeve as shown in Fig 6 .

IPC 8 full level
H01R 13/03 (2006.01); **H01R 13/646** (2006.01); **H01R 24/02** (2006.01)

CPC (source: EP)
H01R 13/035 (2013.01); **H01R 24/40** (2013.01); **H01R 2103/00** (2013.01)

Citation (search report)
• [X] DE 29918358 U1 19991223 - ROSENBERGER HOCHFREQUENZTECH [DE]
• [X] US 2005164552 A1 20050728 - WLOS JAMES [US], et al
• [Y] US 4906207 A 19900306 - BANNING HARMON W [US], et al
• [Y] GB 2272582 A 19940518 - M A COM GREENPAR LIMITED [GB]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2028727 A1 20090225

DOCDB simple family (application)
EP 07114747 A 20070822