

Title (en)

LASER WELDED TRANSMISSION FILTER HOUSING AND METHOD AND APPARATUS FOR MAKING SAME

Title (de)

LASER-GESCHWEISSTES TRANSMISSIONSFILTERGEHÄUSE UND VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG DESSELBEN

Title (fr)

BOITIER DE FILTRE DE BOITE DE VITESSES, SOUDE AU LASER, PROCEDE ET APPAREIL UTILISES POUR SA FABRICATION

Publication

**EP 1137472 A4 20040526 (EN)**

Application

**EP 99968638 A 19990903**

Priority

- DE 19848673 A 19981022
- DE 19860357 A 19981224
- US 9920323 W 19990903
- US 9908698 P 19980904
- US 38780799 A 19990901

Abstract (en)

[origin: WO0013763A1] A preferred transmission filter (10) includes a first flange (18) transparent to a laser beam (58) and includes a second flange (20) opaque to the laser beam (58) and meltable upon exposure thereto. The flanges (18, 20) are in registered, abutting relationship with a laser weld bead (62) at the juncture (44) between the flanges (18, 20) to provide a fluid seal circumscribing the filter (10). The preferred filter manufacturing apparatus (12) includes a laser (54) coupled to a robot arm (50) controlled by a programmable logic controller (52). The controller (52) operates the robot arm (50) in order to direct the laser beam (58) through the first flange (18) onto the second flange (20) and along the juncture (44) to form the laser weld bead (62).

IPC 1-7

**B23K 26/00**; B29C 65/16; B01D 29/01

IPC 8 full level

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Citation (search report)

- [Y] DE 4225679 A1 19940210 - PROAQUA PROVITA DEUTSCHLAND GM [DE]
- [XY] WO 9526869 A1 19951012 - MARQUARDT GMBH [DE], et al
- [Y] US 5049274 A 19910917 - LEASON HAYDEN [US], et al
- See references of WO 0013763A1

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