



New connection on: : 07-03-2018 : 01:44:36 - Last disconnection on: : 06-03-2018 : 23:42:51

V4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 32] connector and plug and tapered and electric+ and magnetic and plane

Results in EPODOC **0**

[SS 33] connector and plug and tapered

Results in EPODOC **553**

[SS 34] 33 and electric+

Results in EPODOC **200**

[SS 35] 34 and magnetic+

Results in EPODOC **1**

[SS 36] 34 and magnet+

Results in EPODOC **2**

[SS 37] ..v

[EPODOC: SS 37] connector and magnetic and tapered

Results in EPODOC **41**

[SS 38] 37 and plug

Results in EPODOC **4**

[SS 39] ..v

[EPODOC: SS 39] IC(H01R)

An operator is missing. *ERROR(-101310)*

[SS 39] IC=(H01R)

An expression is expected. *ERROR(-101305)*

[SS 39] 37 and IC H01R

Results in EPODOC 0

EPODOC: term 'IC H01R' not found in index 'BI'. *WARNING(1)*

[SS 40] /IC H01R

Results in EPODOC 786.001

[SS 41] 37 and 40

Results in EPODOC 8

[SS 42] ..v

[EPODOC: SS 42] ..li



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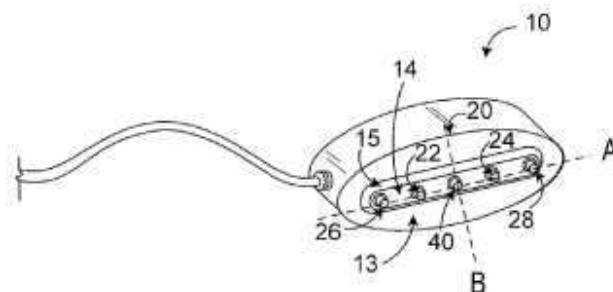
PN - [JP2017022129](#) A 20170126

PR - US20100421587P
20101209; US201113070331
20110323

AP - JP20160177582 20160912

DT - I

CT - || STSE (A)
[US2010080563](#) A1 20100401
[Y] (APPLE INC [US])
[Y] 1-10
* Paragraphs0029-0059,
Figures 1-10 *;
[JPS63274070](#) A 19881111
[Y] (SONY CORP)
[Y] 1-10
* Page2 left-bottom-column
Line1 - Pages4 right-upper-
column Line13, Figures1-3 *;
[JPS4817598Y](#) Y1 19730519 [Y]
[Y] 1-10
* Column1 Line26-Column3



Line11, Figures1-2 *;
[JP55841985U](#) U 19830319 [Y]
 [Y] 1-10
 * Page1 Line19-Page2 Line7,
 Figure2 *;
[JP2000021474](#) A 20000121
 [Y] (MATSUSHITA ELECTRIC
 WORKS LTD)
 [Y] 1-10
 * Paragraph0004 *;
[JP5509990B](#) B1 19750417 [Y]
 [Y] 1-10
 * Column2 Line14-23, Figure2 *;
[JP2005128821](#) A 20050519
 [Y] (FUJITSU LTD)
 [Y] 4
 * Paragraphs0026-0061,
 Figures1-4 *;
[JP3107377U](#) U 20050203 [Y]
 [Y] 9
 * Paragraph0012, Figure3 *;
[JP2009282531](#) A 20091203
 [Y] (SILVERBROOK RES PTY LTD)
 [Y] 10
 * Paragraph0384, Figure30 *;
[JP2013545256](#) A 20131219 [XY]
 [X] 1-10
 * Whole Document *
 * Whole Document *
 [Y] 5-10

- CCI - [G02B6/3817](#) ; [H01R13/24](#) ;
[H01R13/6205](#)
- CUI - [G02B6/3897](#) ; [H01B11/22](#) ;
[H01R13/629](#)
- CQI - [H01R11/30](#)
- CCA - [H01R24/60](#)
- FI - G02B6/40; H01R13/631;
H01R13/639&A; H01R24/86
- FT - 2H036/JA01; 2H036/QA02;
2H036/QA41; 2H036/QA56;
5E021/FA05; 5E021/FA09;
5E021/FA14; 5E021/FA16;
5E021/FB07; 5E021/FB21;
5E021/FC31; 5E021/FC36;
5E021/FC40; 5E021/HA01;
5E021/HC27; 5E021/HC28;
5E123/AB21; 5E123/AB28;

	5E123/AB38; 5E123/AB62; 5E123/AB64; 5E123/AB67; 5E123/AC02; 5E123/AC42; 5E123/BA01; 5E123/BA06; 5E123/CA25; 5E123/CB01; 5E123/EA02
PA	- MICROSOFT TECHNOLOGY LICENSING LLC
TI	- POWER AND DATA CONNECTOR
AB	- PROBLEM TO BE SOLVED: To provide a power and data connector that provides a mechanically simple and aesthetically pleasing mechanism for exchanging power and/or data with an electronic device.SOLUTION: A power and data connector 10 includes a symmetrical planar connection surface 14, a pair of symmetrical power interfaces, and one or more magnetic attractors. The planar connection surface 14 is at a terminal end of a tapered extension 15, and the tapered extension 15 protrudes from a lip surface of the power and data connector 10.SELECTED DRAWING: Figure 1
2/8	© EPODOC / EPO
PN	- JP2014154372 A 20140825
PNFP	- JP5954207B B2 20160720
PR	- JP20130023375 20130208
AP	- JP20130023375 20130208
DT	- I
CCA	- Y02T10/7005 ; Y02T90/121
FI	- B60L11/18&C; B60L11/18&Z; H01R13/53
FT	- 5E087/EE02; 5E087/EE07; 5E087/FF03; 5E087/FF07; 5E087/LL22; 5E087/PP03; 5E087/QQ03; 5E087/QQ04; 5E087/RR34; 5E087/RR49; 5H125/AA01; 5H125/AC12; 5H125/AC23; 5H125/AC24; 5H125/FF12
PA	- (A) AUTO NETWORK GIJUTSU KENKYUSHO; SUMITOMO WIRING SYSTEMS; SUMITOMO ELECTRIC INDUSTRIES

- TI - (A)
CONNECTOR
- AB - (A)
 PROBLEM TO BE SOLVED: To restrain or prevent metal powder from being adhered due to a **magnetic** force of a movable magnet.SOLUTION: A charging **connector** CC comprises: a vehicle side housing 21; a power supply side housing 11; a pair of vehicle side terminal fittings 22; a pair of power supply side terminal fittings 12 connected to the pair of vehicle side terminal fittings 22 for electric conduction; a movable magnet 23 moved between a forward-moving position and a backward-moving position; a compression coil spring 32 energizing the movable magnet 23 to the backward-moving position; a moving member 37 moved between a first contact position contacting the movable magnet 23 at the backward moving position and a second contact position contacting the movable magnet 23 at the forward-moving position; a first **tapered** face 37a interlocking the movable magnet 23 and the moving member 37 with each other; a forward/backward pin 39 moving forward and backward between a rear contact position contacting the moving member 37 at the first contact position and a front contact position contacting the moving member 37 at the second contact position; and a second **tapered** face 37b and a pin-side **tapered** face 39a for interlocking the moving member 37 with the forward/backward pin 39.

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PN - [AU2011239304](#) A1 20120517

PNFP - AU2011239304B B2 20160107

PR - NO20100001526 20101101

AP - AU20110239304 20111024

DT - I

CT - || STSE (B2)
[US3550682](#) A 19701229 [
] (FOWLER RONALD L)
[US7557687](#) B2 20090707 [
] (WATANABE OSAMU [JP])

CCI - [H01F38/14](#)

PA - (A1 B2)
 NEXANS

TI - (A1 B2)
 Underwater Power **Connector**
 System and Use Thereof

AB - (A1 B2)
 An underwater power
 connection system (10)
 comprising at least two
 separable **magnetic** cores (40,
 50) which are operable when
 coupled together to form
 a **magnetic** circuit, wherein the
 at least two cores (40, 50) are

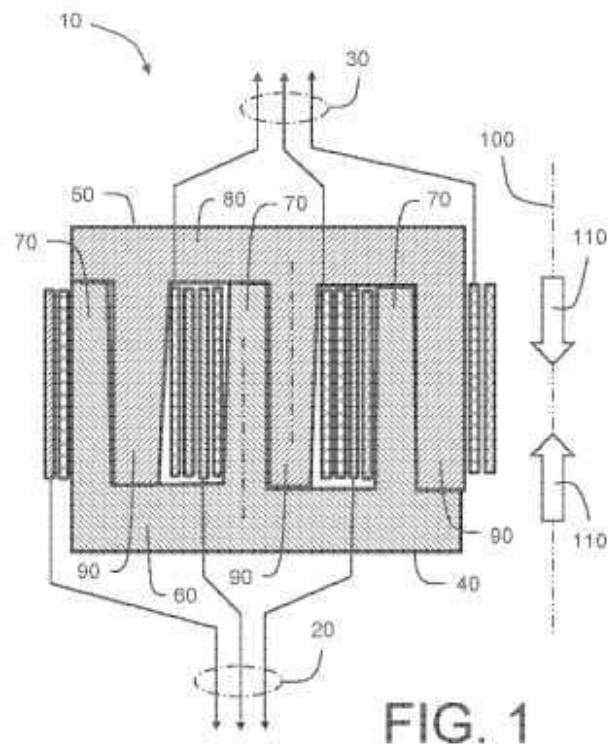


FIG. 1

provided with respective one or more windings, and said cores (40, 50) include a transverse **magnetic** member arrangement (60, 80) supporting **magnetic** limbs (70, 90), wherein the limbs (70, 90) are elongate and are adapted to intermesh with their lateral sides mutually abutting for providing the **magnetic** circuit when the system (10) is in its assembled state (210), characterized in that the limbs (70,90) are of **tapered** form towards their distal ends. 7 50 80 70 7110 90 60 90 40

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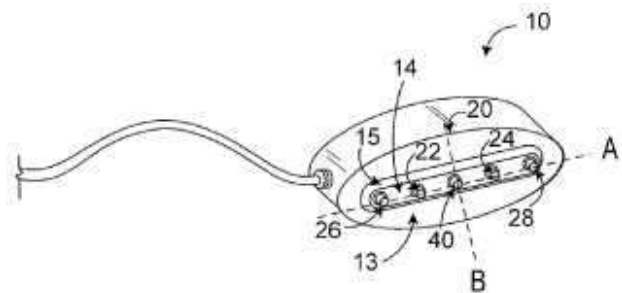
PN - [CN102570166](#) A 20120711

PR - US20100421587P
20101209; US201113070331
20110323

AP - CN20111408231 20111209

DT - I

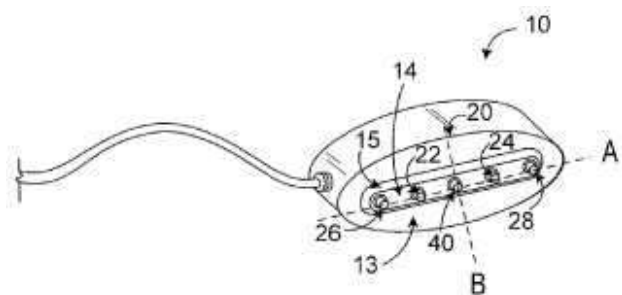
CT - || STSE (A)
[CN101681186](#) A 20100324
[Y] (MICROSOFT CORP)
[Y] 1-10
说明书第5页第4段,附图5
[US2007072442](#) A1 20070329
[Y] (DIFONZO JOHN C [US], et al)
[Y] 3,9
附图3
[US7329128](#) B1 20080212
[A] (AWAD RAMY [US])
[A] 1-10
全文
[US2007116414](#) A1 20070524
[A] (PENUMATCHA VENKATAR
[US], et al)
[A] 1-10
全文
[US2010080563](#) A1 20100401
[Y] (DIFONZO JOHN C [US], et al)
[Y] 1-10
说明书第0029-0047段,附图1,4-8



CCI	- G02B6/3817 ; H01R13/24 ; H01R13/6205
CUI	- G02B6/3897 ; H01B11/22 ; H01R13/629
CQI	- H01R11/30
CCA	- H01R24/60
PA	- MICROSOFT CORP
TI	- Power and data connector
AB	- A power and data connector includes a symmetrical planar connection surface, a pair of symmetrical power interfaces, and one or more magnetic attractors. The planar connection surface is at a terminal end of a tapered extension that protrudes from a lip surface of the power and data connector .

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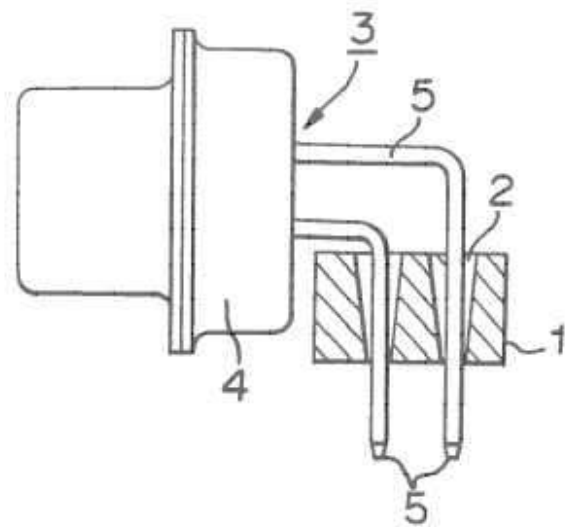
PN	- US2012148195 A1 20120614
PNFP	- US8596881 B2 20131203
PR	- US201113070331 20110323; US20100421587P 20101209
AP	- US201113070331 20110323
DT	- *; Rep
CT	- STSE (B2) US5867621 A 19990202 [] (LUTHER JAMES P [US], et al) US7329128 B1 20080212 [] (AWAD RAMY [US]) US7351066 B2 20080401 [] (DIFONZO JOHN C [US], et al) US7658613 B1 20100209 [] (GRIFFIN PAUL [US], et al) US7722358 B2 20100525 [] (CHATTERJEE MONIQUE [US], et al) US7794263 B1 20100914 [] (KIM MIN CHUL [US], et al) US7841776 B2 20101130 [] (DIFONZO JOHN C [US], et al) US2003068135 A1 20030410 [] (WATANABE YUJI [JP], et al)



	US2009297099 A1 20091203 [] (BENJAMIN SELDON DAVID [US], et al) US2010080563 A1 20100401 [] (DIFONZO JOHN C [US], et al) US2011167187 A1 20110707 [] (CRUMLIN ALEX [US], et al) US2012148196 A1 20120614 [] (PENUMATCHAVENKATAR [US], et al)
	- R141 (A1) US5867621 A []; US2003068135 A1 []; US7329128 B1 []; US7351066 B2 []; US2009297099 A1 []; US7658613 B1 []; US7722358 B2 []; US2012148196 A1 []; US7794263 B1 []; US7841776 B2 []; US2011167187 A1 []; US2010080563 A1 []
CCI	- G02B6/3817 ; H01R13/24 ; H01R13/6205
CUI	- G02B6/3897 ; H01B11/22 ; H01R13/629
CQI	- H01R11/30
CCA	- H01R24/60
PA	- (A1 B2) UMENO HIROO [US]; MICROSOFT CORP [US]
TI	- (A1 B2) POWER AND DATA CONNECTOR
AB	- (A1 B2) A power and data connector includes a symmetrical planar connection surface, a pair of symmetrical power interfaces, and one or more magnetic attractors. The planar connection surface is at a terminal end of a tapered extension that protrudes from a lip surface of the power and data connector.

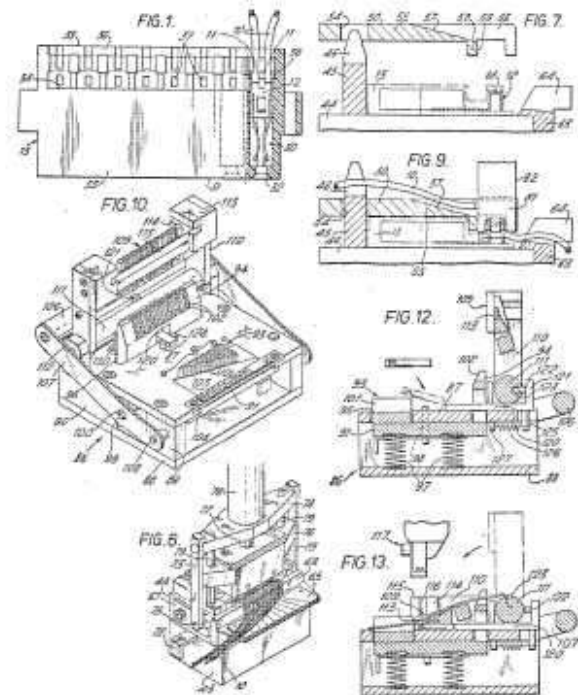
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PN - [US5153539](#) A 19921006
PR - JP19900315072 19901120
AP - US19910762439 19910919
DT - *
CT - [US4329665](#) A []; [US4784618](#) A [];
[US4822303](#) A []; [US4961711](#) A [];
[US4995834](#) A []; [JPS62171173](#) A []
CCI - [H04B15/02](#) ; [H01R13/719](#)
PA - MITSUBISHI ELECTRIC CORP [JP]
TI - **Magnetic** core for a signal line filter
AB - A **magnetic** core for a signal line filter adapted to be assembled in a terminal **connector** for a signal line cable for connecting electronic devices to form a signal line filter, wherein the **magnetic** core is provided with pin insertion holes each having a **tapered** portion in the direction of thickness of the **magnetic** core, or **tapered** portions at both sides in the direction of thickness of the **magnetic** core.



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PN - [GB1500760](#) A 19780208
PR - FR19740017985 19740522
AP - GB19750017653 19750429
DT - **
CCI - [H01R4/2462](#) ; [H01R43/01](#)
CCA - [Y10T29/515](#)
PA - AMP INC
TI - WIRE CONNECTION AND TRIMMING APPARATUS
AB - 1500760 Making electrical connections; bending cutters
AMP Inc 29 April 1975 [22 May 1974] 17653/75 Headings B3A and B3W Apparatus for inserting insulated wires 10, Fig. 1, into slots 11 in terminals 12 in a **connector** housing 13 so as to pierce the insulation and for trimming the wire ends comprises wirereceiving combs 45, 63, Figs. 7 and 9, on a horizontal bed 44 with their teeth aligned, a third comb 55 movable between a position remote from the bed 44 to permit the housing to be placed on the bed and a position adjacent the bed overlying the housings, and a wire insertion and trimmings ram 77, Fig. 6. The bed 44 has a **magnetic** base 43 and guide passages for posts 51, 53 depending from a plate 50 carrying the comb 55. After positioning a housing 13 the plate 50 is depressed downwardly against springs 52 to clamp the housing, a catch plate 72 engaging the posts 53 to retain the plate in the clamping position with the comb 45 projecting through a slot 54 in the plate. Wires are now threaded through aligned slots of the three combs after which the ram assembly 74, 77, 78 is latched to the bed 44 by



depending arms 73, Fig. 6
having pins 75 engaging
bayonet slots in bed plates 67.
Guide rods 79 for the insertion
head 76 locate in bearings 61
on the bed. Operation of the
pneumatic ram 77 now lowers
the head 76 which carries a row
of recessed teeth 81 for
inserting the wires, Fig. 9, an
end of wire having been
trimmed between the toothed
member 82 and the end of the
comb 55. In another form of
this apparatus, Figs. 12 and 13
and Fig. 10 (not shown), front
and rear combs 93, 94
projecting through slots in a
base 87 are mounted with
locating pins 98 on a platen 91
which is pressed against the
base by springs 97. An upper
comb 109 is carried by arms
110 on an axle 111 having a
recess 123 engaged by a pin
122 on a spring-pressed catch
120. Placement of a **connector**
housing between the comb 93
and the catch 120 releases the
catch from the axle 111
allowing the axle to be turned
for positioning the comb 109
over the housing. A
doubleheaded, pneumatically-
operated inserter 117 is used,
the appropriate head being
indexed into the lower
position. **Tapered** rails (131),
Fig. 11 (not shown), on the
inserter engage guide ways 116
carried by the arms 110. After
the trimming and insertion
operating a handle 106 is
depressed which, through arms
107 and a rod (99), lowers the
platen 91 and combs 93, 94
permitting the catch 120 to
eject the **connector** housing on
the pin 122 enters the recess

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PN - [GB1181111](#) A 19700211

PR - JP19660008858
19660216; JP19660008859
19660216

AP - GB19670005728 19670207

DT - **

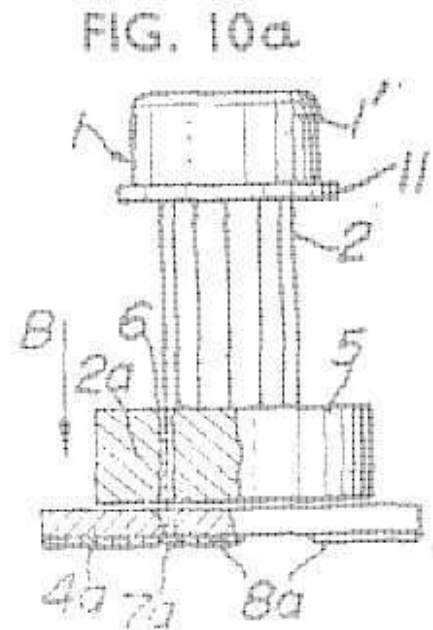
CCI - [H05K3/301](#) ; [H05K7/1053](#) ;
[H05K7/12](#)

CCA - [Y10T29/49147](#)

PA - HITACHI LTD [JP]

TI - A Method for Connecting an
Electric Circuit Member to a
Female Member and Means for
Performing the Method

AB - 1,181,111. Soldering. HITACHI
Ltd. 7 Feb., 1967 [16 Feb.,
19662)], No. 5728/67. Heading
B3R. [Also in Division H2] A
circuit member 1, Fig. 10a, such
as a single component, an
integrated circuit device, or a
hybrid circuit device, having a
plurality of lead wires 2
protruding from the body
1<SP>1</SP> thereof, is
connected to a female member
such as a socket **connector**, an
apertured printed circuit board
4a, or a jig, with the aid of an
intermediate member 5 of
insulating material through
holes 6 in which the lead wires
2 are slidably inserted before
presentation to the female
member. In order to retain the
wires 2 in holes 6, wires 2
and/or body 1<SP>1</SP> may
be made of **magnetic** material,
while the member 5 comprises
an insulated or insulating
magnet. Alternatively, member 5
may comprise resilient lugs
(not shown) which clip over a



flange 11 on body 1<SP>1</SP>;
 or the holes 6 may diverge or
 converge within member 5 (Figs.
 7a, 7b, not shown). To facilitate
 the insertion of wires 2 in
 member 5, the holes 6 may have
 flared entrances (Fig. 8a, not
 shown); this feature may be
 combined with a rearrangement
 of the disposition of the wires
 (Fig. 8b, not shown). **Tapered**
 channels from holes 6 may
 extend to the periphery of
 member 5 (Fig. 8c, not shown);
 or member 5 may comprise two
 separate concentric parts,
 holes 6 being formed along
 their abutting surfaces (Fig. 8d,
 not shown). To ensure the
 correct orientation of wires 2
 relative to the female member,
 member 5 may be of polygonal
 or other non-circular cross-
 section (Figs. 9a-9e, not shown),
 the female member having a
 complementary recess to
 receive the member 5;
 moreover, registering
 protrusions or other marks may
 be provided on body
 1<SP>1</SP> and the female
 member. When member 5 is
 used to assist the permanent
 connection of wires 2 to printed
 wiring on an apertured
 substrate, e.g. by soldering, the
 member 5 being retained as a
 spacer between body
 1<SP>1</SP> and the substrate,
 a heat-conductive insulating
 material such as beryllia
 ceramic is preferably used for
 member 5.