

Title (en)

COUPLER FOR TRANSMITTING SIGNALS ACROSS A ROTATING INTERFACE

Title (de)

KOPPLER ZUR SIGNALÜBERTRAGUNG ÜBER EINE ROTIERENDE SCHNITTSTELLE

Title (fr)

COUPLEUR PERMETTANT DE TRANSMETTRE DES SIGNAUX VIA UNE INTERFACE ROTATIVE

Publication

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Application

EP 98922368 A 19980515

Priority

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Abstract (en)

[origin: WO9852350A1] A coupler (20) for transmitting signals across a rotating interface (22). The coupler (20) comprises a first part (24) and a second part (26) mounted for rotation about an axis with respect to the first part (24). The first part (24) comprises a first magnetic coil (30) and a first optical signal transmission device (32). The second part comprises a second magnetic coil (34) inductively coupled to the first magnetic coil (30) and a second optical signal transmission device (36). The first and second magnetic coils (30 and 34) are inductively coupled for transmitting electrical power across the rotating interface (22). The first and second optical signal transmission devices (32 and 36) are optically coupled for transmission of an optical signal therebetween. One of the first and second optical signal transmission devices (32 and 36) includes an electrical to optical signal conversion device (46), and the other of the first and second optical signal transmission devices includes an optical to electrical signal conversion device (48). The first and second optical signal transmission devices (32 and 36) preferably also include optical fibers. The coupler can be used to mount a video camera on a pan and tilt mechanism so that power, video, and control signals can be transmitted across the rotating interface (22).

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IPC 8 full level

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