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**Moscovitch**

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(54) **UNIVERSAL QUICK CONNECTOR**  
**APPARATUS FOR AN LCD MONITOR**

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248/917; 248/121

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(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,348,116 A	10/1967	Freeman et al.	320/115
5,009,384 A	4/1991	Gerke et al.	248/343
5,144,290 A	* 9/1992	Honda et al.	248/917
5,168,429 A	* 12/1992	Hosoi	361/680
5,583,529 A	* 12/1996	Satou	345/87
5,600,580 A	* 2/1997	Honjo et al.	708/107
5,687,939 A	11/1997	Moscovitch	248/122.1
5,815,735 A	* 9/1998	Baker	439/31

6,042,414 A	*	3/2000	Kunert	439/374
6,231,371 B1	*	5/2001	Helot	439/374
6,366,453 B1	*	4/2002	Wang et al.	361/681
6,400,560 B1	*	6/2002	Chian	361/681

**FOREIGN PATENT DOCUMENTS**

WO WO 00/39493 7/2000

**OTHER PUBLICATIONS**

International Search Report, PCT/IB00/01148, EPO, Dec.  
20, 2000.

\* cited by examiner

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(57) **ABSTRACT**

A universal connector apparatus comprising a first compo-  
nent and a second component. The first component is fixedly  
secured to a housing of an LCD monitor and includes a  
wedge shaped projection or protrusion and a first electrical  
connector. The second component forms a docking station  
and is fixedly secured to any other support surface where the  
LCD monitor is to be attached and supported from. The  
second component includes a second electrical connector  
intended to matingly engage with the first electrical connec-  
tor. The LCD monitor is attached to the second component  
by slidably engaging the wedge shaped protrusion or pro-  
jection of the first component into a wedge shaped recess  
formed in the second component. This automatically centers  
the two electrical connectors before they matingly engage  
one another and prevents damage to the male pins of the  
male electrical connector. The apparatus enables an LCD  
monitor to be quickly and easily attached and released from  
a support surface incorporating the second component so  
that the monitor may be used at a different location as may  
be needed.

**10 Claims, 8 Drawing Sheets**

