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**Burris**

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(54) **COAXIAL CABLE CONNECTOR WITH INTEGRAL RFI PROTECTION**

1,371,742 A	3/1921	Dringman
1,488,175 A	3/1924	Strandell
1,667,485 A	4/1928	MacDonald
1,766,869 A	6/1930	Austin
1,801,999 A	4/1931	Bowman
1,885,761 A	11/1932	Peirce, Jr.
1,959,302 A	5/1934	Paige
2,013,526 A	9/1935	Schmitt
2,059,920 A	11/1936	Weatherhead, Jr.

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(Continued)

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CA	2096710	11/1994
CN	201149936	11/2008

(Continued)

FOREIGN PATENT DOCUMENTS

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(57) **ABSTRACT**

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CPC ..... **H01R 9/05** (2013.01); **H01R 9/0521** (2013.01); **H01R 13/622** (2013.01); **H01R 4/304** (2013.01)

A coaxial cable connector for coupling an end of a coaxial cable to a terminal and providing RF shielding is disclosed. The coaxial cable connector has a coupler, body, post and/or retainer with an integral contacting portion that is monolithic with at least a portion of the post or retainer to establish electrical continuity. In this way, electrical continuity is established through the coupler, the post, and/or the retainer of the coaxial cable connector other than by the use of a component unattached from the coupler, the post, the body, and the retainer to provide RF shielding such that the integrity of an electrical signal transmitted through coaxial cable connector is maintained regardless of the tightness of the coupling of the connector to the terminal. When assembled the coupler and post or retainer provide at least one circuitous path resulting in RF shielding such that spurious RF signals are attenuated.

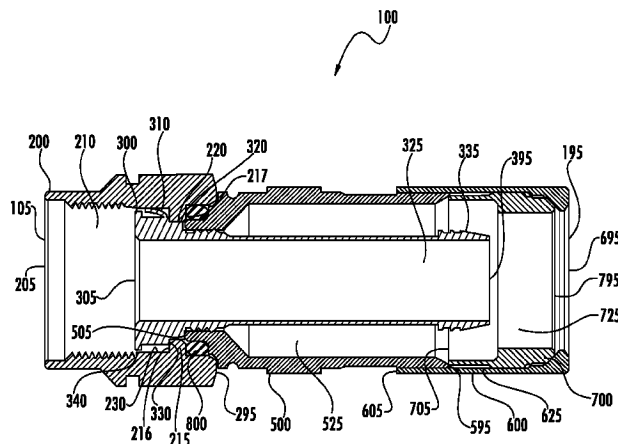
(58) **Field of Classification Search**  
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See application file for complete search history.

(56) **References Cited**

**23 Claims, 23 Drawing Sheets**

U.S. PATENT DOCUMENTS

331,169 A	11/1885	Thomas
346,958 A	8/1886	Stone
459,951 A	9/1891	Warner
589,216 A	8/1897	McKee



(56)

## References Cited

## U.S. PATENT DOCUMENTS

2,102,495	A	12/1937	England	3,663,926	A	5/1972	Brandt
2,258,528	A	10/1941	Wurzburger	3,665,371	A	5/1972	Cripps
2,258,737	A	10/1941	Browne	3,668,612	A	6/1972	Nepovim
2,325,549	A	7/1943	Ryzowitz	3,669,472	A	6/1972	Nadsady
2,480,963	A	9/1949	Quinn	3,671,922	A	6/1972	Zerlin et al.
2,544,654	A	3/1951	Brown	3,671,926	A	6/1972	Nepovim
2,549,647	A	4/1951	Turenne	3,678,444	A	7/1972	Stevens et al.
2,694,187	A	11/1954	Nash	3,678,445	A	7/1972	Brancaleone
2,705,652	A	4/1955	Kaiser	3,680,034	A	7/1972	Chow et al.
2,754,487	A	7/1956	Carr et al.	3,681,739	A	8/1972	Kornick
2,755,331	A	7/1956	Melcher	3,683,320	A	8/1972	Woods et al.
2,757,351	A	7/1956	Klostermann	3,686,623	A	8/1972	Nijman
2,762,025	A	9/1956	Melcher	3,694,792	A	9/1972	Wallo
2,785,384	A	3/1957	Wickesser	3,694,793	A	9/1972	Concelman
2,805,399	A	9/1957	Leeper	3,697,930	A	10/1972	Shirey
2,816,949	A	12/1957	Curtiss	3,706,958	A	12/1972	Blanchenot
2,870,420	A	1/1959	Malek	3,708,186	A	1/1973	Takagi et al.
2,878,039	A	3/1959	Hoegee et al.	3,710,005	A	1/1973	French
2,881,406	A	4/1959	Arson	3,739,076	A	6/1973	Schwartz
2,963,536	A	12/1960	Kokalas	3,744,007	A	7/1973	Horak
3,001,169	A	9/1961	Blonder	3,744,011	A	7/1973	Blanchenot
3,015,794	A	1/1962	Kishbaugh	3,761,870	A	9/1973	Drezin et al.
3,051,925	A	8/1962	Felts	3,778,535	A	12/1973	Forney, Jr.
3,091,748	A	5/1963	Takes et al.	3,781,762	A	12/1973	Quackenbush
3,094,364	A	6/1963	Lingg	3,781,898	A	12/1973	Holloway
3,103,548	A	9/1963	Concelman	3,783,178	A	1/1974	Philibert et al.
3,106,548	A	10/1963	Lavalou	3,787,796	A	1/1974	Barr
3,140,106	A	7/1964	Thomas et al.	3,793,610	A	2/1974	Brishka
3,184,706	A	5/1965	Atkins	3,798,589	A	3/1974	Deardurff
3,194,292	A	7/1965	Borowsky	3,808,580	A	4/1974	Johnson
3,196,382	A	7/1965	Morello, Jr.	3,810,076	A	5/1974	Hutter
3,206,540	A	9/1965	Cohen	3,835,443	A	9/1974	Arnold et al.
3,245,027	A	4/1966	Ziegler, Jr.	3,836,700	A	9/1974	Niemeyer
3,275,913	A	9/1966	Blanchard et al.	3,845,453	A	10/1974	Hemmer
3,278,890	A	10/1966	Cooney	3,846,738	A	11/1974	Nepovim
3,281,756	A	10/1966	O'Keefe et al.	3,854,003	A	12/1974	Duret
3,281,757	A	10/1966	Bonhomme	3,854,789	A	12/1974	Kaplan
3,290,069	A	12/1966	Davis	3,858,156	A	12/1974	Zarro
3,292,136	A	12/1966	Somerset	3,879,102	A	4/1975	Horak
3,320,575	A	5/1967	Brown et al.	3,886,301	A	5/1975	Cronin et al.
3,321,732	A	5/1967	Forney, Jr.	3,907,335	A	9/1975	Burge et al.
3,336,563	A	8/1967	Hyslop	3,907,399	A	9/1975	Spinner
3,348,186	A	10/1967	Rosen	3,910,673	A	10/1975	Stokes
3,350,667	A	10/1967	Shreve	3,915,539	A	10/1975	Collins
3,350,677	A	10/1967	Daum	3,936,132	A	2/1976	Hutter
3,355,698	A	11/1967	Keller	3,937,547	A	2/1976	Lee-Kemp
3,372,364	A	3/1968	O'Keefe et al.	3,953,097	A	4/1976	Graham
3,373,243	A	3/1968	Janowiak et al.	3,960,428	A	6/1976	Naus et al.
3,390,374	A	6/1968	Forney, Jr.	3,963,320	A	6/1976	Spinner
3,406,373	A	10/1968	Forney, Jr.	3,963,321	A	6/1976	Burger et al.
3,430,184	A	2/1969	Acord	3,970,355	A	7/1976	Pitschi
3,448,430	A	6/1969	Kelly	3,972,013	A	7/1976	Shapiro
3,453,376	A	7/1969	Ziegler, Jr. et al.	3,976,352	A	8/1976	Spinner
3,465,281	A	9/1969	Florer	3,980,805	A	9/1976	Lipari
3,475,545	A	10/1969	Stark et al.	3,985,418	A	10/1976	Spinner
3,494,400	A	2/1970	McCoy et al.	3,986,736	A	10/1976	Takagi et al.
3,498,647	A	3/1970	Schroder	4,017,139	A	4/1977	Nelson
3,499,671	A	3/1970	Osborne	4,022,966	A	5/1977	Gajajiva
3,501,737	A	3/1970	Harris et al.	4,030,742	A	6/1977	Eidelberg et al.
3,517,373	A	6/1970	Jamon	4,030,798	A	6/1977	Paoli
3,526,871	A	9/1970	Hobart	4,032,177	A	6/1977	Anderson
3,533,051	A	10/1970	Ziegler, Jr.	4,045,706	A	8/1977	Daffner et al.
3,537,065	A	10/1970	Winston	4,046,451	A	9/1977	Juds et al.
3,544,705	A	12/1970	Winston	4,053,200	A	10/1977	Pugner
3,551,882	A	12/1970	O'Keefe	4,056,043	A	11/1977	Sriramamurty et al.
3,564,487	A	2/1971	Upstone et al.	4,059,330	A	11/1977	Shirey
3,587,033	A	6/1971	Brorein et al.	4,079,343	A	3/1978	Nijman
3,596,933	A	8/1971	Luckenbill	4,082,404	A	4/1978	Flatt
3,601,776	A	8/1971	Curl	4,090,028	A	5/1978	Vontobel
3,603,912	A	9/1971	Kelly	4,093,335	A	6/1978	Schwartz et al.
3,614,711	A	10/1971	Anderson et al.	4,100,943	A	7/1978	Terada et al.
3,622,952	A	11/1971	Hilbert	4,106,839	A	8/1978	Cooper
3,629,792	A	12/1971	Dorrell	4,109,126	A	8/1978	Halbeck
				4,125,308	A	11/1978	Schilling
				4,126,372	A	11/1978	Hashimoto et al.
				4,131,332	A	12/1978	Hogendobler et al.
				4,136,897	A	1/1979	Haluch

(56)

## References Cited

## U.S. PATENT DOCUMENTS

4,156,554 A	5/1979	Aujla	4,616,900 A	10/1986	Cairns
4,165,911 A	8/1979	Laudig	4,632,487 A	12/1986	Wargula
4,168,921 A	9/1979	Blanchard	4,634,213 A	1/1987	Larsson et al.
4,173,385 A	11/1979	Fenn et al.	4,640,572 A	2/1987	Conlon
4,174,875 A	11/1979	Wilson et al.	4,645,281 A	2/1987	Burger
4,187,481 A	2/1980	Boutros	4,647,135 A	3/1987	Reinhardt
4,193,655 A	3/1980	Herrmann, Jr.	4,650,228 A	3/1987	McMills et al.
4,194,338 A	3/1980	Trafton	4,655,159 A	4/1987	McMills
4,206,963 A	6/1980	English et al.	4,655,534 A	4/1987	Stursa
4,212,487 A	7/1980	Jones et al.	4,660,921 A	4/1987	Hauver
4,225,162 A	9/1980	Dola	4,666,190 A	5/1987	Yamabe et al.
4,227,765 A	10/1980	Neumann et al.	4,668,043 A	5/1987	Saba et al.
4,229,714 A	10/1980	Yu	4,673,236 A	6/1987	Musolff et al.
4,250,348 A	2/1981	Kitagawa	4,674,818 A	6/1987	McMills et al.
4,273,405 A	6/1981	Law	4,676,577 A	6/1987	Szegda
4,280,749 A	7/1981	Hemmer	4,682,832 A	7/1987	Punako et al.
4,285,564 A	8/1981	Spinner	4,684,201 A	8/1987	Hutter
4,290,663 A	9/1981	Fowler et al.	4,688,876 A	8/1987	Morelli
4,296,986 A	10/1981	Herrmann, Jr.	4,688,878 A	8/1987	Cohen et al.
4,307,926 A	12/1981	Smith	4,690,482 A	9/1987	Chamberland et al.
4,309,050 A	1/1982	Legris	4,691,976 A	9/1987	Cowen
4,310,211 A	1/1982	Bunnell et al.	4,703,987 A	11/1987	Gallusser et al.
4,322,121 A	3/1982	Riches et al.	4,703,988 A	11/1987	Raux et al.
4,326,769 A	4/1982	Dorsey et al.	4,713,021 A	12/1987	Kobler
4,334,730 A	6/1982	Colwell et al.	4,717,355 A	1/1988	Mattis
4,339,166 A	7/1982	Dayton	4,720,155 A	1/1988	Schildkraut et al.
4,346,958 A	8/1982	Blanchard	4,728,301 A	3/1988	Hemmer et al.
4,354,721 A	10/1982	Luzzi	4,734,050 A	3/1988	Negre et al.
4,358,174 A	11/1982	Dreyer	4,734,666 A	3/1988	Ohya et al.
4,373,767 A	2/1983	Cairns	4,737,123 A	4/1988	Paler et al.
4,389,081 A	6/1983	Gallusser et al.	4,738,009 A	4/1988	Down et al.
4,400,050 A	8/1983	Hayward	4,738,628 A	4/1988	Rees
4,407,529 A	10/1983	Holman	4,739,126 A	4/1988	Gutter et al.
4,408,821 A	10/1983	Forney, Jr.	4,746,305 A	5/1988	Nomura
4,408,822 A	10/1983	Nikitas	4,747,656 A	5/1988	Miyahara et al.
4,412,717 A	11/1983	Monroe	4,747,786 A	5/1988	Hayashi et al.
4,421,377 A	12/1983	Spinner	4,749,821 A	6/1988	Linton et al.
4,426,127 A	1/1984	Kubota	4,755,152 A	7/1988	Elliot et al.
4,444,453 A	4/1984	Kirby et al.	4,757,297 A	7/1988	Frawley
4,452,503 A	6/1984	Forney, Jr.	4,759,729 A	7/1988	Kemppainen et al.
4,456,323 A	6/1984	Pitcher et al.	4,761,146 A	8/1988	Schoel
4,462,653 A	7/1984	Flederbach et al.	4,772,222 A	9/1988	Laudig et al.
4,464,000 A	8/1984	Werth et al.	4,789,355 A	12/1988	Lee
4,464,001 A	8/1984	Collins	4,789,759 A	12/1988	Jones
4,469,386 A	9/1984	Ackerman	4,795,360 A	1/1989	Newman et al.
4,470,657 A	9/1984	Deacon	4,797,120 A	1/1989	Ulery
4,477,132 A	10/1984	Moser et al.	4,806,116 A	2/1989	Ackerman
4,484,792 A	11/1984	Tengler et al.	4,807,891 A	2/1989	Neher
4,484,796 A	11/1984	Sato et al.	4,808,128 A	2/1989	Werth
4,490,576 A	12/1984	Bolante et al.	4,810,017 A	3/1989	Knak et al.
4,506,943 A	3/1985	Drogo	4,813,886 A	3/1989	Roos et al.
4,515,427 A	5/1985	Smit	4,820,185 A	4/1989	Moulin
4,525,017 A	6/1985	Schildkraut et al.	4,834,675 A	5/1989	Samchisen
4,531,790 A	7/1985	Selvin	4,834,676 A	5/1989	Tackett
4,531,805 A	7/1985	Werth	4,835,342 A	5/1989	Guginsky
4,533,191 A	8/1985	Blackwood	4,836,580 A	6/1989	Farrell
4,540,231 A	9/1985	Forney, Jr.	4,836,801 A	6/1989	Ramirez
RE31,995 E	10/1985	Ball	4,838,813 A	6/1989	Pauza et al.
4,545,633 A	10/1985	McGeary	4,846,731 A	7/1989	Alwine
4,545,637 A	10/1985	Bosshard et al.	4,854,893 A	8/1989	Morris
4,575,274 A	3/1986	Hayward	4,857,014 A	8/1989	Alf et al.
4,580,862 A	4/1986	Johnson	4,867,489 A	9/1989	Patel
4,580,865 A	4/1986	Fryberger	4,867,706 A	9/1989	Tang
4,583,811 A	4/1986	McMills	4,869,679 A	9/1989	Szegda
4,585,289 A	4/1986	Bocher	4,874,331 A	10/1989	Iverson
4,588,246 A	5/1986	Schildkraut et al.	4,881,912 A	11/1989	Thommen et al.
4,593,964 A	6/1986	Forney, Jr. et al.	4,892,275 A	1/1990	Szegda
4,596,434 A	6/1986	Saba et al.	4,902,246 A	2/1990	Samchisen
4,596,435 A	6/1986	Bickford	4,906,207 A	3/1990	Banning et al.
4,597,621 A	7/1986	Burns	4,915,651 A	4/1990	Bout
4,598,959 A	7/1986	Selvin	4,921,447 A	5/1990	Capp et al.
4,598,961 A	7/1986	Cohen	4,923,412 A	5/1990	Morris
4,600,263 A	7/1986	DeChamp et al.	4,925,403 A	5/1990	Zorzy
			4,927,385 A	5/1990	Cheng
			4,929,188 A	5/1990	Lionetto et al.
			4,934,960 A	6/1990	Capp et al.
			4,938,718 A	7/1990	Guendel

(56)

## References Cited

## U.S. PATENT DOCUMENTS

4,957,456	A	9/1990	Olson et al.	5,371,819	A	12/1994	Szegda
4,973,265	A	11/1990	Heeren	5,371,821	A	12/1994	Szegda
4,979,911	A	12/1990	Spencer	5,371,827	A	12/1994	Szegda
4,990,104	A	2/1991	Schieferly	5,380,211	A	1/1995	Kawaguchi et al.
4,990,105	A	2/1991	Karloovich	5,389,005	A	2/1995	Kodama
4,990,106	A	2/1991	Szegda	5,393,244	A	2/1995	Szegda
4,992,061	A	2/1991	Brush, Jr. et al.	5,397,252	A	3/1995	Wang
5,002,503	A	3/1991	Campbell et al.	5,413,504	A	5/1995	Kloecker et al.
5,007,861	A	4/1991	Stirling	5,431,583	A	7/1995	Szegda
5,011,422	A	4/1991	Yeh	5,435,745	A	7/1995	Booth
5,011,432	A	4/1991	Sucht et al.	5,435,751	A	7/1995	Papenheim et al.
5,018,822	A	5/1991	Freismuth et al.	5,435,760	A	7/1995	Miklos
5,021,010	A	6/1991	Wright	5,439,386	A	8/1995	Ellis et al.
5,024,606	A	6/1991	Ming-Hwa	5,444,810	A	8/1995	Szegda
5,030,126	A	7/1991	Hanlon	5,455,548	A	10/1995	Grandchamp et al.
5,037,328	A	8/1991	Karloovich	5,456,611	A	10/1995	Henry et al.
5,046,964	A	9/1991	Welsh et al.	5,456,614	A	10/1995	Szegda
5,052,947	A	10/1991	Brodie et al.	5,466,173	A	11/1995	Down
5,055,060	A	10/1991	Down et al.	5,470,257	A	11/1995	Szegda
5,059,139	A	10/1991	Spinner	5,474,478	A	12/1995	Ballog
5,059,747	A	10/1991	Bawa et al.	5,488,268	A	1/1996	Bauer et al.
5,062,804	A	11/1991	Jamet et al.	5,490,033	A	2/1996	Cronin
5,066,248	A	11/1991	Gaver, Jr. et al.	5,490,801	A	2/1996	Fisher, Jr. et al.
5,067,912	A	11/1991	Bickford et al.	5,494,454	A	2/1996	Johnsen
5,073,129	A	12/1991	Szegda	5,499,934	A	3/1996	Jacobsen et al.
5,080,600	A	1/1992	Baker et al.	5,501,616	A	3/1996	Holliday
5,083,943	A	1/1992	Tarrant	5,516,303	A	5/1996	Yohn et al.
5,120,260	A	6/1992	Jackson	5,525,076	A	6/1996	Down
5,127,853	A	7/1992	McMills et al.	5,542,861	A	8/1996	Anhalt et al.
5,131,862	A	7/1992	Gershfeld	5,548,088	A	8/1996	Gray et al.
5,137,470	A	8/1992	Doles	5,550,521	A	8/1996	Bernaude et al.
5,137,471	A	8/1992	Verespej et al.	5,564,938	A	10/1996	Shenkal et al.
5,141,448	A	8/1992	Mattingly et al.	5,571,028	A	11/1996	Szegda
5,141,451	A	8/1992	Down	5,586,910	A	12/1996	Del Negro et al.
5,149,274	A	9/1992	Gallusser et al.	5,595,499	A	1/1997	Zander et al.
5,150,924	A	9/1992	Yokomatsu et al.	5,598,132	A	1/1997	Stabile
5,154,636	A	10/1992	Vaccaro et al.	5,607,320	A	3/1997	Wright
5,161,993	A	11/1992	Leibfried, Jr.	5,607,325	A	3/1997	Toma
5,166,477	A	11/1992	Perin, Jr. et al.	5,609,501	A	3/1997	McMills et al.
5,167,545	A	12/1992	O'Brien et al.	5,620,339	A	4/1997	Gray et al.
5,169,323	A	12/1992	Kawai et al.	5,632,637	A	5/1997	Diener
5,181,161	A	1/1993	Hirose et al.	5,632,651	A	5/1997	Szegda
5,183,417	A	2/1993	Bools	5,644,104	A	7/1997	Porter et al.
5,186,501	A	2/1993	Mano	5,649,723	A	7/1997	Larsson
5,186,655	A	2/1993	Glenday et al.	5,651,698	A	7/1997	Locati et al.
5,195,905	A	3/1993	Pesci	5,651,699	A	7/1997	Holliday
5,195,906	A	3/1993	Szegda	5,653,605	A	8/1997	Woehl et al.
5,205,547	A	4/1993	Mattingly	5,667,405	A	9/1997	Holliday
5,205,761	A	4/1993	Nilsson	5,681,172	A	10/1997	Moldenhauer
5,207,602	A	5/1993	McMills et al.	5,683,263	A	11/1997	Hsu
5,215,477	A	6/1993	Weber et al.	5,702,263	A	12/1997	Baumann et al.
5,217,391	A	6/1993	Fisher, Jr.	5,722,856	A	3/1998	Fuchs et al.
5,217,392	A	6/1993	Hosler, Sr.	5,735,704	A	4/1998	Anthony
5,217,393	A	6/1993	Del Negro et al.	5,743,131	A	4/1998	Holliday et al.
5,221,216	A	6/1993	Gabany et al.	5,746,617	A	5/1998	Porter, Jr. et al.
5,227,587	A	7/1993	Paterek	5,746,619	A	5/1998	Harting et al.
5,247,424	A	9/1993	Harris et al.	5,769,652	A	6/1998	Wider
5,269,701	A	12/1993	Leibfried, Jr.	5,774,344	A	6/1998	Casebolt
5,281,762	A	1/1994	Long et al.	5,775,927	A	7/1998	Wider
5,283,853	A	2/1994	Szegda	5,788,289	A	8/1998	Cronley
5,284,449	A	2/1994	Vaccaro	5,791,698	A	8/1998	Wartluft et al.
5,294,864	A	3/1994	Do	5,797,633	A	8/1998	Katzer et al.
5,295,864	A	3/1994	Birch et al.	5,817,978	A	10/1998	Hermant et al.
5,316,348	A	5/1994	Franklin	5,863,220	A	1/1999	Holliday
5,316,494	A	5/1994	Flanagan et al.	5,877,452	A	3/1999	McConnell
5,318,459	A	6/1994	Shields	5,879,191	A	3/1999	Burris
5,321,205	A	6/1994	Bawa et al.	5,882,226	A	3/1999	Bell et al.
5,334,032	A	8/1994	Myers et al.	5,897,795	A	4/1999	Lu et al.
5,334,051	A	8/1994	Devine et al.	5,906,511	A	5/1999	Bozzer et al.
5,338,225	A	8/1994	Jacobsen et al.	5,917,153	A	6/1999	Geroldinger
5,342,218	A	8/1994	McMills et al.	5,921,793	A	7/1999	Phillips
5,354,217	A	10/1994	Gabel et al.	5,938,465	A	8/1999	Fox, Sr.
5,362,250	A	11/1994	McMills et al.	5,944,548	A	8/1999	Saito
				5,951,327	A	9/1999	Marik
				5,954,708	A	9/1999	Lopez et al.
				5,957,716	A	9/1999	Buckley et al.
				5,967,852	A	10/1999	Follingstad et al.

(56)

## References Cited

## U.S. PATENT DOCUMENTS

5,975,949	A	11/1999	Holliday et al.	6,450,829	B1	9/2002	Weisz-Margulescu
5,975,951	A	11/1999	Burris et al.	6,454,463	B1	9/2002	Halbach et al.
5,977,841	A	11/1999	Lee et al.	6,464,526	B1	10/2002	Seufert et al.
5,997,350	A	12/1999	Burris et al.	6,467,816	B1	10/2002	Huang
6,010,349	A	1/2000	Porter, Jr.	6,468,100	B1	10/2002	Meyer et al.
6,019,635	A	2/2000	Nelson	6,491,546	B1	12/2002	Perry
6,022,237	A	2/2000	Esh	D468,696	S	1/2003	Montena
6,032,358	A	3/2000	Wild	6,506,083	B1	1/2003	Bickford et al.
6,036,540	A	3/2000	Beloritsky	6,520,800	B1	2/2003	Michelbach et al.
6,042,422	A	3/2000	Youtsey	6,530,807	B2	3/2003	Rodrigues et al.
6,048,229	A	4/2000	Lazaro, Jr.	6,540,531	B2	4/2003	Syed et al.
6,053,743	A	4/2000	Mitchell et al.	6,558,194	B2	5/2003	Montena
6,053,769	A	4/2000	Kubota et al.	6,572,419	B2	6/2003	Feye-Homann
6,053,777	A	4/2000	Boyle	6,576,833	B2	6/2003	Covaro et al.
6,062,607	A	5/2000	Bartholomew	6,619,876	B2	9/2003	Vaitkus et al.
6,080,015	A	6/2000	Andreescu	6,634,906	B1	10/2003	Yeh
6,083,053	A	7/2000	Anderson, Jr. et al.	6,663,397	B1	12/2003	Lin et al.
6,089,903	A	7/2000	Stafford Gray et al.	6,676,446	B2	1/2004	Montena
6,089,912	A	7/2000	Tallis et al.	6,683,253	B1	1/2004	Lee
6,089,913	A	7/2000	Holliday	6,692,285	B2	2/2004	Islam
6,093,043	A	7/2000	Gray et al.	6,692,286	B1	2/2004	De Cet
6,095,828	A	8/2000	Burland	6,695,636	B2	2/2004	Hall et al.
6,095,841	A	8/2000	Felps	6,705,875	B2	3/2004	Berghorn et al.
6,123,550	A	9/2000	Burkert et al.	6,705,884	B1	3/2004	McCarthy
6,123,567	A	9/2000	McCarthy	6,709,280	B1	3/2004	Gretz
6,132,234	A	10/2000	Waidner et al.	6,712,631	B1	3/2004	Youtsey
6,146,197	A	11/2000	Holliday et al.	6,716,041	B2	4/2004	Ferderer et al.
6,152,752	A	11/2000	Fukuda	6,716,062	B1	4/2004	Palinkas et al.
6,152,753	A	11/2000	Johnson et al.	6,733,336	B1	5/2004	Montena et al.
6,153,830	A	11/2000	Montena	6,733,337	B2	5/2004	Kodaira
6,162,995	A	12/2000	Bachle et al.	6,752,633	B2	6/2004	Aizawa et al.
6,164,977	A	12/2000	Lester	6,761,571	B2	7/2004	Hida
6,174,206	B1	1/2001	Yentile et al.	6,767,248	B1	7/2004	Hung
6,183,298	B1	2/2001	Henningsen	6,769,926	B1	8/2004	Montena
6,199,913	B1	3/2001	Wang	6,780,029	B1	8/2004	Gretz
6,199,920	B1	3/2001	Neustadtl	6,780,042	B1	8/2004	Badescu et al.
6,210,216	B1	4/2001	Tso-Chin et al.	6,780,052	B2	8/2004	Montena et al.
6,210,219	B1	4/2001	Zhu et al.	6,780,068	B2	8/2004	Bartholoma et al.
6,210,222	B1	4/2001	Langham et al.	6,783,394	B1	8/2004	Holliday
6,217,383	B1	4/2001	Holland et al.	6,786,767	B1	9/2004	Fuks et al.
6,238,240	B1	5/2001	Yu	6,790,081	B2	9/2004	Burris et al.
6,239,359	B1	5/2001	Lilienthal, II et al.	6,793,528	B2	9/2004	Lin et al.
6,241,553	B1	6/2001	Hsia	6,802,738	B1	10/2004	Henningsen
6,250,974	B1	6/2001	Kerek	6,805,581	B2	10/2004	Love
6,257,923	B1	7/2001	Stone et al.	6,805,583	B2	10/2004	Holliday et al.
6,261,126	B1	7/2001	Stirling	6,805,584	B1	10/2004	Chen
6,267,612	B1	7/2001	Arcykiewicz et al.	6,808,415	B1	10/2004	Montena
6,271,464	B1	8/2001	Cunningham	6,817,272	B2	11/2004	Holland
6,331,123	B1	12/2001	Rodrigues	6,817,896	B2	11/2004	Derenthal
6,332,815	B1	12/2001	Bruce	6,817,897	B2	11/2004	Chee
6,352,448	B1	3/2002	Holliday et al.	6,827,608	B2	12/2004	Hall et al.
6,358,077	B1	3/2002	Young	6,830,479	B2	12/2004	Holliday
6,361,348	B1	3/2002	Hall et al.	6,848,115	B2	1/2005	Sugitara et al.
6,361,364	B1	3/2002	Holland et al.	6,848,939	B2	2/2005	Stirling
6,375,509	B2	4/2002	Mountford	6,848,940	B2	2/2005	Montena
6,394,840	B1	5/2002	Gassauer et al.	6,848,941	B2	2/2005	Wlos et al.
6,396,367	B1	5/2002	Rosenberger	6,884,113	B1	4/2005	Montena
D458,904	S	6/2002	Montena	6,884,115	B2	4/2005	Malloy
6,406,330	B2	6/2002	Bruce	6,887,102	B1	5/2005	Burris et al.
6,409,534	B1	6/2002	Weisz-Margulescu	6,929,265	B2	8/2005	Holland et al.
D460,739	S	7/2002	Fox	6,929,508	B1	8/2005	Holland
D460,740	S	7/2002	Montena	6,935,866	B2	8/2005	Kerekes et al.
D460,946	S	7/2002	Montena	6,939,169	B2	9/2005	Islam et al.
D460,947	S	7/2002	Montena	6,942,516	B2	9/2005	Shimoyama et al.
D460,948	S	7/2002	Montena	6,942,520	B2	9/2005	Barlian et al.
6,422,884	B1	7/2002	Babasick et al.	6,945,805	B1	9/2005	Bollinger
6,422,900	B1	7/2002	Hogan	6,948,976	B2	9/2005	Goodwin et al.
6,425,782	B1	7/2002	Holland	6,953,371	B2	10/2005	Baker et al.
D461,166	S	8/2002	Montena	6,955,563	B1	10/2005	Croan
D461,167	S	8/2002	Montena	6,971,912	B2	12/2005	Montena et al.
D461,778	S	8/2002	Fox	7,008,263	B2	3/2006	Holland
D462,058	S	8/2002	Montena	7,018,216	B1	3/2006	Clark et al.
D462,060	S	8/2002	Fox	7,018,235	B1	3/2006	Burris et al.
				7,029,326	B2	4/2006	Montena
				7,063,565	B2	6/2006	Ward
				7,070,447	B1	7/2006	Montena
				7,077,697	B2	7/2006	Koiman

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