U.S. PATENT DOCUMENTS

| | | | | |
|---|---|---|---|---|
| 4,821,095 | A | | 4/1989 | Temple |
| 4,853,345 | A | | 8/1989 | Himelick |
| 4,868,624 | A | | 9/1989 | Grung et al. |
| 4,893,160 | A | | 1/1990 | Blanchard |
| 4,914,058 | A | | 4/1990 | Blanchard |
| 4,941,026 | A | | 7/1990 | Temple |
| 4,967,245 | A | | 10/1990 | Cogan et al. |
| 4,974,059 | A | | 11/1990 | Kinzer |
| 4,990,463 | A | | 2/1991 | Mori |
| 4,992,390 | A | | 2/1991 | Chang |
| 5,027,180 | A | | 6/1991 | Nishizawa et al. |
| 5,071,782 | A | | 12/1991 | Mori |
| 5,072,266 | A | | 12/1991 | Buluccea |
| 5,079,608 | A | | 1/1992 | Wodarczyk et al. |
| 5,105,243 | A | | 4/1992 | Nakagawa et al. |
| 5,164,325 | A | * | 11/1992 | Cogan et al. ..... 438/270 |
| 5,216,275 | A | | 6/1993 | Chen |
| 5,219,777 | A | | 6/1993 | Kang |
| 5,219,793 | A | | 6/1993 | Cooper et al. |
| 5,233,215 | A | | 8/1993 | Baliga |
| 5,262,336 | A | | 11/1993 | Pike, Jr. et al. |
| 5,268,311 | A | | 12/1993 | Euen et al. |
| 5,275,965 | A | | 1/1994 | Manning |
| 5,294,824 | A | | 3/1994 | Okada |
| 5,298,761 | A | | 3/1994 | Aoki et al. |
| 5,300,447 | A | | 4/1994 | Anderson |
| 5,326,711 | A | | 7/1994 | Malhi |
| 5,350,937 | A | | 9/1994 | Yamazaki et al. |
| 5,365,102 | A | | 11/1994 | Mehrotra et al. |
| 5,366,914 | A | | 11/1994 | Takahashi et al. |
| 5,389,815 | A | | 2/1995 | Takahashi |
| 5,405,794 | A | | 4/1995 | Kim |
| 5,418,376 | A | | 5/1995 | Muraoka et al. |
| 5,424,231 | A | | 6/1995 | Yang |
| 5,429,977 | A | | 7/1995 | Lu et al. |
| 5,430,311 | A | | 7/1995 | Murakami et al. |
| 5,430,324 | A | | 7/1995 | Bencuya |
| 5,436,189 | A | | 7/1995 | Beasom |
| 5,438,215 | A | | 8/1995 | Tihanyi |
| 5,442,214 | A | | 8/1995 | Yang |
| 5,473,176 | A | | 12/1995 | Kakumoto |
| 5,473,180 | A | | 12/1995 | Ludikhuize |
| 5,474,943 | A | | 12/1995 | Hshieh et al. |
| 5,519,245 | A | | 5/1996 | Tokura et al. |
| 5,541,425 | A | | 7/1996 | Nishihara |
| 5,554,862 | A | | 9/1996 | Omura et al. |
| 5,567,634 | A | | 10/1996 | Hebert et al. |
| 5,567,635 | A | | 10/1996 | Acovic et al. |
| 5,572,048 | A | | 11/1996 | Sugawara |
| 5,576,245 | A | | 11/1996 | Cogan et al. |
| 5,578,851 | A | | 11/1996 | Hshieh et al. |
| 5,581,100 | A | | 12/1996 | Ajit |
| 5,583,065 | A | | 12/1996 | Miwa |
| 5,592,005 | A | | 1/1997 | Floyd et al. |
| 5,595,927 | A | | 1/1997 | Chen et al. |
| 5,597,765 | A | | 1/1997 | Yilmaz et al. |
| 5,605,852 | A | | 2/1997 | Bencuya |
| 5,623,152 | A | | 4/1997 | Majumdar et al. |
| 5,629,543 | A | | 5/1997 | Hshieh et al. |
| 5,637,898 | A | | 6/1997 | Baliga |
| 5,639,676 | A | | 6/1997 | Hshieh et al. |
| 5,648,670 | A | | 7/1997 | Blanchard |
| 5,656,843 | A | | 8/1997 | Goodyear et al. |
| 5,665,619 | A | | 9/1997 | Kwan et al. |
| 5,670,803 | A | | 9/1997 | Beilstein, Jr. et al. |
| 5,689,128 | A | | 11/1997 | Hshieh et al. |
| 5,693,569 | A | | 12/1997 | Ueno |
| 5,705,409 | A | | 1/1998 | Witek |
| 5,710,072 | A | | 1/1998 | Krautschneider et al. |
| 5,714,781 | A | | 2/1998 | Yamamoto et al. |
| 5,719,409 | A | | 2/1998 | Singh et al. |
| 5,770,878 | A | | 6/1998 | Beasom |
| 5,776,813 | A | | 7/1998 | Huang et al. |
| 5,780,343 | A | | 7/1998 | Bashir |
| 5,801,417 | A | | 9/1998 | Tsang et al. |
| 5,877,528 | A | | 3/1999 | So |
| 5,879,971 | A | | 3/1999 | Witek |
| 5,879,994 | A | | 3/1999 | Kwan et al. |
| 5,895,951 | A | | 4/1999 | So et al. |
| 5,895,952 | A | | 4/1999 | Darwish et al. |
| 5,897,360 | A | | 4/1999 | Kawaguchi |
| 5,906,680 | A | | 5/1999 | Meyerson |
| 5,917,216 | A | | 6/1999 | Floyd et al. |
| 5,929,481 | A | | 7/1999 | Hsieh et al. |
| 5,943,581 | A | | 8/1999 | Lu et al. |
| 5,949,124 | A | | 9/1999 | Hadizad et al. |
| 5,959,324 | A | | 9/1999 | Kohyama |
| 5,960,271 | A | | 9/1999 | Wollesen et al. |
| 5,972,741 | A | | 10/1999 | Kubo et al. |
| 5,973,360 | A | | 10/1999 | Tihanyi |
| 5,976,936 | A | | 11/1999 | Miyajima et al. |
| 5,981,344 | A | | 11/1999 | Hshieh et al. |
| 5,981,996 | A | | 11/1999 | Fujishima |
| 5,998,833 | A | | 12/1999 | Baliga |
| 6,005,271 | A | | 12/1999 | Hshieh |
| 6,008,097 | A | | 12/1999 | Yoon et al. |
| 6,011,298 | A | | 1/2000 | Blanchard |
| 6,015,727 | A | | 1/2000 | Wanlass |
| 6,020,250 | A | | 2/2000 | Kenney et al. |
| 6,037,202 | A | | 3/2000 | Witek |
| 6,037,628 | A | | 3/2000 | Huang |
| 6,037,632 | A | | 3/2000 | Omura et al. |
| 6,040,600 | A | | 3/2000 | Uenishi et al. |
| 6,049,108 | A | | 4/2000 | Williams et al. |
| 6,057,558 | A | | 5/2000 | Yamamoto et al. |
| 6,066,878 | A | | 5/2000 | Neilson |
| 6,081,009 | A | | 6/2000 | Neilson |
| 6,084,264 | A | | 7/2000 | Darwish |
| 6,084,268 | A | | 7/2000 | de Frésart et al. |
| 6,087,232 | A | | 7/2000 | Kim et al. |
| 6,096,608 | A | | 8/2000 | Williams |
| 6,097,063 | A | | 8/2000 | Fujihira |
| 6,103,578 | A | | 8/2000 | Uenishi et al. |
| 6,104,054 | A | | 8/2000 | Corsi et al. |
| 6,110,799 | A | | 8/2000 | Huang |
| 6,114,727 | A | | 9/2000 | Ogura et al. |
| 6,137,152 | A | | 10/2000 | Wu |
| 6,156,606 | A | | 12/2000 | Michaelis |
| 6,156,611 | A | | 12/2000 | Lan et al. |
| 6,163,052 | A | | 12/2000 | Liu et al. |
| 6,168,983 | B1 | | 1/2001 | Rumennik et al. |
| 6,168,996 | B1 | | 1/2001 | Numazawa et al. |
| 6,171,935 | B1 | | 1/2001 | Nance et al. |
| 6,174,773 | B1 | | 1/2001 | Fujishima |
| 6,174,785 | B1 | | 1/2001 | Parekh et al. |
| 6,184,545 | B1 | | 2/2001 | Werner et al. |
| 6,184,555 | B1 | | 2/2001 | Tihanyi et al. |
| 6,188,104 | B1 | | 2/2001 | Choi et al. |
| 6,188,105 | B1 | | 2/2001 | Kocon et al. |
| 6,191,447 | B1 | | 2/2001 | Baliga |
| 6,194,741 | B1 | * | 2/2001 | Kinzer et al. ..... 257/77 |
| 6,198,127 | B1 | | 3/2001 | Kocon |
| 6,201,279 | B1 | | 3/2001 | Pfirsch |
| 6,204,097 | B1 | | 3/2001 | Shen et al. |
| 6,207,994 | B1 | | 3/2001 | Rumennik et al. |
| 6,225,649 | B1 | | 5/2001 | Minato |
| 6,228,727 | B1 | | 5/2001 | Lim et al. |
| 6,239,464 | B1 | | 5/2001 | Tsuchitani et al. |
| 6,265,269 | B1 | | 7/2001 | Chen et al. |
| 6,271,100 | B1 | | 8/2001 | Ballantine et al. |
| 6,271,562 | B1 | | 8/2001 | Deboy et al. |