U.S. PATENT DOCUMENTS

2,089,005 A * 8/1937 Sherman et al. 52/717.04
2,142,181 A 1/1939 Croce 108/7
2,149,741 A 3/1939 Miles 20/5
2,171,010 A 8/1939 Schuetz et al. 108/7
2,171,155 A * 8/1939 Wright, Jr. 162/117
2,174,098 A 9/1939 Stein 108/7
2,187,203 A 1/1940 Johnston 108/8
2,199,760 A 5/1940 Schuetz 108/7
2,206,042 A 7/1940 Novak 154/2
2,238,017 A 4/1941 Duncan 154/2
2,255,736 A * 9/1941 Odell 52/278
2,560,521 A 7/1951 Camp et al. 154/86
2,633,441 A 3/1953 Guttress 154/87
2,851,873 A * 9/1958 Malcolm 52/262
2,954,302 A 9/1960 Gorman, Jr. 117/60
3,185,297 A 5/1965 Rutledge 206/59
3,284,980 A 11/1966 Dinkel 52/600
3,289,371 A 12/1966 Pearson et al. 52/338
3,391,037 A 7/1968 McNulty 156/71
3,607,486 A 9/1971 Jacks et al. 156/41
3,608,261 A * 9/1971 French et al. 52/316
3,766,003 A 10/1973 Schuller et al. 162/156
3,830,687 A 8/1974 Re et al. 161/168
3,868,300 A 2/1975 Wheeler 164/124
3,927,501 A 12/1975 Allen et al. 52/555
3,929,947 A 12/1975 Schwartz et al. 264/42
3,935,021 A 1/1976 Greve et al. 106/111
3,941,632 A 3/1976 Swedenberg et al. 156/71
3,944,698 A 3/1976 Dierks et al. 428/219
3,947,398 A 3/1976 Williams 260/29.6
3,969,567 A 7/1976 Occleshaw et al.
3,993,822 A 11/1976 Knauf et al. 428/213
4,015,391 A 4/1977 Epstein et al. 52/520
4,020,237 A 4/1977 Von Hazmburg 428/535
4,040,851 A 8/1977 Ziegler
4,047,355 A 9/1977 Knorr 52/738
4,065,333 A 12/1977 Lawlis et al. 156/40
4,065,597 A 12/1977 Gillespie 428/285
4,073,997 A 2/1978 Richards et al. 428/285
4,112,174 A 9/1978 Hannes et al. 428/220
4,128,699 A 12/1978 Kole et al. 428/498
4,135,029 A 1/1979 Pfeffer 428/284
4,148,781 A 4/1979 Narukawa et al. 260/42.51
4,181,767 A 1/1980 Steinau 428/219
4,187,130 A 2/1980 Kautz 156/42
4,195,110 A 3/1980 Dierks et al. 428/218
4,203,788 A 5/1980 Clear 156/44
4,242,406 A 12/1980 El Bouhnini et al. 428/236
4,263,365 A 4/1981 Burgess et al. 428/310
4,265,979 A 5/1981 Baehr et al. 428/171
4,277,526 A 7/1981 Jackson
4,288,959 A 9/1981 Murdock 52/518
4,296,169 A 10/1981 Shannon 428/298
4,303,722 A 12/1981 Pilgrim 428/213
4,310,478 A 1/1982 Balslev et al.
4,324,082 A 4/1982 Rutkowski et al. 52/481
4,335,177 A 6/1982 Takeuchi 428/247
4,344,804 A 8/1982 Bijen et al. 156/42
4,344,910 A 8/1982 Bijen 264/257
4,351,867 A 9/1982 Mulvey et al. 428/70
4,361,616 A 11/1982 Bomers 428/215
4,363,666 A 12/1982 Johnson et al.
4,364,212 A 12/1982 Pearson et al. 52/281
4,366,197 A 12/1982 Hanlon et al. 428/43
4,378,405 A 3/1983 Pilgrim 428/322.7
4,403,006 A 9/1983 Bruce et al. 428/70
4,428,775 A * 1/1984 Johnson et al. 524/4
4,437,274 A 3/1984 Slocum et al. 52/105
4,468,909 A 9/1984 Eaton 52/541
4,477,300 A 10/1984 Pilgrim 156/44
4,504,533 A 3/1985 Altenhofer et al. 428/70
4,506,060 A 3/1985 White, Sr. et al. 525/163
4,543,159 A 9/1985 Johnson et al.
4,571,356 A 2/1986 White, Sr. et al. 428/143
4,637,860 A 1/1987 Harper et al. 162/117
4,647,496 A 3/1987 Lehnert et al. 428/251
4,664,707 A 5/1987 Wilson et al. 106/18.11
4,681,802 A 7/1987 Gaa et al. 428/288
4,722,866 A 2/1988 Wilson et al. 428/411.1
4,810,569 A 3/1989 Lehnert et al. 428/285
4,810,576 A 3/1989 Gaa et al. 428/391
4,811,538 A 3/1989 Lehnert et al. 52/455
4,902,347 A * 2/1990 Soroushian et al. 524/5
5,148,645 A 9/1992 Lehnert et al. 52/443
5,220,762 A 6/1993 Lehnert et al. 52/408
5,241,795 A * 9/1993 Giroux et al. 52/503
5,319,900 A 6/1994 Lehnert et al. 52/408
5,342,680 A 8/1994 Randall 428/285
5,347,784 A * 9/1994 Crick et al. 52/520
5,371,989 A 12/1994 Lehnert et al. 52/309.17
5,397,631 A 3/1995 Green et al. 428/219
5,401,588 A 3/1995 Garvey et al. 428/703
5,433,048 A 7/1995 Strasser
5,439,518 A 8/1995 Francis et al. 106/705
5,501,056 A 3/1996 Hannah et al. 52/748.1
5,601,888 A 2/1997 Fowler 428/34
5,614,307 A 3/1997 Andersen et al. 428/294.7
5,625,986 A * 5/1997 Mansfield et al. 52/255
5,641,584 A * 6/1997 Andersen et al. 428/703
5,644,880 A 7/1997 Lehnert et al. 52/408
5,685,116 A * 11/1997 Bradshaw et al. 52/311.1
5,694,728 A * 12/1997 Heath et al. 52/554
5,704,179 A 1/1998 Lehnert et al. 52/408
5,718,785 A 2/1998 Randall 156/39
5,772,846 A 6/1998 Jaffee 162/145
5,791,109 A 8/1998 Lehnert et al. 52/309.17
5,799,446 A 9/1998 Tamlyn
5,830,548 A 11/1998 Andersen et al. 428/36.4
5,836,123 A * 11/1998 Gulino 52/288.1
5,881,502 A 3/1999 Tamlyn
5,897,108 A 4/1999 Gordon et al. 269/50
5,906,364 A 5/1999 Thompson et al. 269/22
5,945,182 A 8/1999 Fowler et al. 428/34
5,960,598 A 10/1999 Tamlyn
5,981,406 A 11/1999 Randall 442/71
5,985,061 A 11/1999 Doi et al.
5,993,303 A 11/1999 Fladgard et al. 451/356
6,001,169 A 12/1999 Kawai
6,018,924 A 2/2000 Tamlyn
6,029,966 A 2/2000 Hertz et al. 269/266
6,258,190 B1 7/2001 Sciarrino et al.
6,276,107 B1 8/2001 Waggoner et al. 52/554
6,293,534 B1 9/2001 Leban 269/309
6,338,229 B1 * 1/2002 Botzen 52/371
6,341,458 B1 1/2002 Burt 52/287.1
6,346,146 B1 2/2002 Duselis et al.
6,354,049 B1 3/2002 Bennett 52/287.1
6,358,585 B1 3/2002 Wolff 428/36.6
6,367,222 B1 4/2002 Timbrel et al. 52/555
6,506,248 B1 1/2003 Duselis et al.
6,510,667 B1 1/2003 Cottier et al.
6,591,566 B1 * 7/2003 Rodlin 52/311.1
6,625,950 B1 9/2003 Shreiner et al.
6,684,597 B1 2/2004 Butcher
6,705,052 B1 3/2004 Larson
7,028,436 B2 * 4/2006 Bezubic, Jr. 52/288.1
2003/0226327 A1 * 12/2003 Perry 52/287.1

FOREIGN PATENT DOCUMENTS

CA 794590 9/1968
CA 993779 7/1976
DE 1 033 133 B1 6/1955
DE 1 509 853 B1 4/1963