

**Table 1. Number of UTILITY Patents Granted per 100,000 Population, by Metropolitan Area, 1998**

Metropolitan areas are based on definitions effective July 1, 1999. MSA= metropolitan statistical area; NECMA= New England county metropolitan area; PMSA= primary metropolitan statistical area. The geographic distribution of patents is based on the residence of the first-named inventor.

| Metro Area Name   | Utility Patents Granted | Population 1998 | Patents per 100K pop. | Metro Area Name                    | Utility Patents Granted | Population 1998 | Patents per 100K pop. |
|---|-------------------------|-----------------|-----------------------|------------------------------------|-------------------------|-----------------|-----------------------|
| San Jose, CA PMSA   | 4931                    | 1,641,215       | 300.4                 | Appleton-Oshkosh-Neenah, WI MSA    | 193                     | 344,464         | 56.0                  |
| Boise City, ID MSA  | 748                     | 395,953         | 188.9                 | Kokomo, IN MSA                     | 56                      | 100,176         | 55.9                  |
| Rochester, MN MSA   | 209                     | 116,702         | 179.1                 | Seattle-Bellevue-Everett, WA PMSA  | 1275                    | 2,312,978       | 55.1                  |
| Boulder-Longmont, CO PMSA                                 | 446                     | 267,274         | 166.9                 | Orange County, CA PMSA             | 1484                    | 2,721,701       | 54.5                  |
| Rochester, NY MSA   | 1749                    | 1,081,883       | 161.7                 | Greeley, CO PMSA                   | 86                      | 159,429         | 53.9                  |
| Corvallis, OR MSA   | 109                     | 77,755          | 140.2                 | Albany-Schenectady-Troy, NY MSA    | 467                     | 871,604         | 53.6                  |
| Austin-San Marcos, TX MSA                                 | 1440                    | 1,105,909       | 130.2                 | Yolo, CA PMSA                      | 81                      | 153,849         | 52.6                  |
| Burlington, VT NECMA                                      | 246                     | 192,895         | 127.5                 | Santa Fe, NM MSA                   | 74                      | 141,730         | 52.2                  |
| Dutchess County, NY PMSA                                  | 329                     | 265,317         | 124.0                 | New London-Norwich, CT NECMA       | 128                     | 245,740         | 52.1                  |
| Fort Collins-Loveland, CO MSA                             | 271                     | 231,221         | 117.2                 | Portland-Vancouver, OR-WA PMSA     | 948                     | 1,818,955       | 52.1                  |
| Trenton, NJ PMSA  | 361                     | 331,629         | 108.9                 | Newark, NJ PMSA                    | 1014                    | 1,952,407       | 51.9                  |
| San Francisco, CA PMSA                                    | 1705                    | 1,683,309       | 101.3                 | Gainesville, FL MSA                | 102                     | 198,662         | 51.3                  |
| Santa Cruz-Watsonville, CA PMSA                           | 243                     | 242,994         | 100.0                 | Peoria-Pekin, IL MSA               | 177                     | 344,779         | 51.3                  |
| Middlesex-Somerset-Hunterdon, NJ PMSA                     | 1027                    | 1,121,504       | 91.6                  | Brazoria, TX PMSA                  | 116                     | 230,335         | 50.4                  |
| Binghamton, NY MSA  | 191                     | 249,022         | 76.7                  | Cedar Rapids, IA MSA               | 92                      | 182,651         | 50.4                  |
| Raleigh-Durham-Chapel Hill, NC MSA                        | 828                     | 1,079,873       | 76.7                  | Dallas, TX PMSA                    | 1471                    | 3,209,886       | 45.8                  |
| Wilmington-Newark, DE-MD PMSA                             | 413                     | 565,329         | 73.1                  | Iowa City, IA MSA                  | 47                      | 102,724         | 45.8                  |
| Minneapolis-St. Paul, MN-WI MSA                           | 2051                    | 2,831,234       | 72.4                  | Hartford, CT NECMA                 | 507                     | 1,110,065       | 45.7                  |
| Ann Arbor, MI PMSA  | 388                     | 547,646         | 70.8                  | West Palm Beach-Boca Raton, FL MSA | 472                     | 1,032,625       | 45.7                  |
| Oakland, CA PMSA  | 1461                    | 2,318,522       | 63.0                  | Monmouth-Ocean, NJ PMSA            | 497                     | 1,093,253       | 45.5                  |
| Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH NECMA    | 3687                    | 5,867,187       | 62.8                  | Cincinnati, OH-KY-IN PMSA          | 714                     | 1,617,836       | 44.1                  |
| New Haven-Bridgeport-Stamford-Danbury-Waterbury, CT NECMA | 1024                    | 1,631,866       | 62.8                  | Ventura, CA PMSA                   | 320                     | 731,967         | 43.7                  |
| Santa Barbara-Santa Maria-Lompoc, CA MSA                  | 241                     | 389,502         | 61.9                  | Akron, OH PMSA                     | 298                     | 688,952         | 43.3                  |
| Saginaw-Bay City-Midland, MI MSA                          | 246                     | 401,991         | 61.2                  | Detroit, MI PMSA                   | 1913                    | 4,473,853       | 42.8                  |
| Madison, WI MSA   | 258                     | 424,586         | 60.8                  | Phoenix-Mesa, AZ MSA               | 1182                    | 2,931,004       | 40.3                  |
| San Diego, CA MSA   | 1673                    | 2,780,592       | 60.2                  | Sheboygan, WI MSA                  | 44                      | 110,170         | 39.9                  |
| Hamilton-Middletown, OH PMSA                              | 190                     | 330,428         | 57.5                  | Allentown-Bethlehem-Easton, PA MSA | 244                     | 616,877         | 39.6                  |
| Colorado Springs, CO MSA                                  | 278                     | 490,378         | 56.7                  | Elmira, NY MSA                     | 36                      | 92,021          | 39.1                  |
|   |                         |                 |                       | Racine, WI PMSA                    | 71                      | 186,119         | 38.1                  |
|   |                         |                 |                       | Lafayette, IN MSA                  | 65                      | 172,220         | 37.7                  |

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|---|-------------------------|-----------------|-----------------------|
| Chicago, IL PMSA                        | 2959                    | 7,939,351       | 37.3                  |
| Salt Lake City-Ogden, UT MSA            | 472                     | 1,267,745       | 37.2                  |
| Houston, TX PMSA                        | 1445                    | 3,931,688       | 36.8                  |
| Daytona Beach, FL MSA                   | 348                     | 948,522         | 36.7                  |
| Rockford, IL MSA                        | 131                     | 356,887         | 36.7                  |
| Indianapolis, IN MSA                    | 556                     | 1,519,194       | 36.6                  |
| Bergen-Passaic, NJ PMSA                 | 481                     | 1,344,266       | 35.8                  |
| Grand Rapids-Muskegon-Holland, MI MSA   | 368                     | 1,037,933       | 35.5                  |
| Philadelphia, PA-NJ PMSA                | 1758                    | 4,946,562       | 35.5                  |
| Milwaukee-Waukesha, WI PMSA             | 502                     | 1,459,805       | 34.4                  |
| Cleveland-Lorain-Elyria, OH PMSA        | 755                     | 2,222,731       | 34.0                  |
| Richland-Kennewick-Pasco, WA MSA        | 62                      | 182,709         | 33.9                  |
| State College, PA MSA                   | 45                      | 132,700         | 33.9                  |
| Albuquerque, NM MSA                     | 228                     | 678,633         | 33.6                  |
| Champaign-Urbana, IL MSA                | 56                      | 167,788         | 33.4                  |
| Eau Claire, WI MSA                      | 48                      | 143,861         | 33.4                  |
| Huntsville, AL MSA                      | 110                     | 340,428         | 32.3                  |
| Charlottesville, VA MSA                 | 48                      | 149,190         | 32.2                  |
| Reno, NV MSA                            | 101                     | 313,660         | 32.2                  |
| Tucson, AZ MSA                          | 250                     | 790,755         | 31.6                  |
| Pittsburgh, PA MSA                      | 736                     | 2,346,153       | 31.4                  |
| Canton-Massillon, OH MSA                | 124                     | 402,207         | 30.8                  |
| Melbourne-Titusville-Palm Bay, FL MSA   | 143                     | 466,093         | 30.7                  |
| Athens, GA MSA                          | 42                      | 138,679         | 30.3                  |
| Toledo, OH MSA                          | 185                     | 609,935         | 30.3                  |
| Denver, CO PMSA                         | 581                     | 1,938,642       | 30.0                  |
| Parkersburg-Marietta, WV-OH MSA         | 45                      | 150,181         | 30.0                  |
| Elkhart-Goshen, IN MSA                  | 51                      | 172,310         | 29.6                  |
| South Bend, IN MSA                      | 76                      | 258,088         | 29.4                  |
| Des Moines, IA MSA                      | 128                     | 436,922         | 29.3                  |
| Lincoln, NE MSA                         | 69                      | 235,589         | 29.3                  |
| Lynchburg, VA MSA                       | 61                      | 208,039         | 29.3                  |
| Fort Wayne, IN MSA                      | 140                     | 481,191         | 29.1                  |
| St. Louis, MO-IL MSA                    | 743                     | 2,563,801       | 29.0                  |
| Lexington, KY MSA                       | 129                     | 449,645         | 28.7                  |
| Nassau-Suffolk, NY PMSA                 | 768                     | 2,673,489       | 28.7                  |
| Greenville-Spartanburg-Anderson, SC MSA | 261                     | 918,351         | 28.4                  |
| Santa Rosa, CA PMSA                     | 122                     | 433,304         | 28.2                  |
| Atlanta, GA MSA                         | 1034                    | 3,746,059       | 27.6                  |

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|--|-------------------------|-----------------|-----------------------|
| Knoxville, TN MSA                              | 182                     | 659,074         | 27.6                  |
| Washington, DC-MD-VA-WV PMSA                   | 1292                    | 4,673,902       | 27.6                  |
| Baton Rouge, LA MSA                            | 158                     | 575,129         | 27.5                  |
| Benton Harbor, MI MSA                          | 44                      | 160,245         | 27.5                  |
| Provo-Orem, UT MSA                             | 92                      | 335,635         | 27.4                  |
| Buffalo-Niagra Falls, NY MSA                   | 315                     | 1,152,541       | 27.3                  |
| Bryan-College Station, TX MSA                  | 36                      | 133,407         | 27.0                  |
| Kalamazoo-Battle Creek, MI MSA                 | 120                     | 446,331         | 26.9                  |
| San Luis Obispo-Atascadero-Paso Robles, CA MSA | 63                      | 234,366         | 26.9                  |
| Bellingham, WA MSA                             | 42                      | 156,830         | 26.8                  |
| Lancaster, PA MSA                              | 121                     | 456,414         | 26.5                  |
| Newburgh, NY-PA PMSA                           | 98                      | 369,392         | 26.5                  |
| Decatur, IL MSA                                | 30                      | 113,772         | 26.4                  |
| Baltimore, MD PMSA                             | 647                     | 2,483,952       | 26.0                  |
| Johnson City-Kingsport-Bristol, TN-VA MSA      | 120                     | 462,345         | 26.0                  |
| Lansing-East Lansing, MI MSA                   | 116                     | 449,683         | 25.8                  |
| Jackson, MI MSA                                | 40                      | 156,157         | 25.6                  |
| Los Angeles-Long Beach, CA PMSA                | 2335                    | 9,213,533       | 25.3                  |
| Janesville-Beloit, WI MSA                      | 38                      | 150,736         | 25.2                  |
| York, PA MSA                                   | 94                      | 373,255         | 25.2                  |
| Lawrence, KS MSA                               | 23                      | 93,137          | 24.7                  |
| Galveston-Texas City TX PMSA                   | 60                      | 245,556         | 24.4                  |
| Providence-Warwick-Pawtucket, RI NECMA         | 221                     | 905,612         | 24.4                  |
| Reading, PA MSA                                | 87                      | 355,956         | 24.4                  |
| Tulsa, OK MSA                                  | 189                     | 776,906         | 24.3                  |
| Eugene-Springfield, OR MSA                     | 76                      | 314,068         | 24.2                  |
| Syracuse, NY MSA                               | 176                     | 734,640         | 24.0                  |
| Panama City, FL MSA                            | 35                      | 146,999         | 23.8                  |
| Barnstable-Yarmouth, MA NECMA                  | 49                      | 208,418         | 23.5                  |
| Harrisburg-Lebanon-Carlisle, PA MSA            | 145                     | 616,031         | 23.5                  |
| Columbus, OH MSA                               | 342                     | 1,469,604       | 23.3                  |
| Fort Lauderdale, FL PMSA                       | 349                     | 1,503,407       | 23.2                  |
| Pittsfield, MA NECMA                           | 30                      | 133,038         | 22.5                  |
| Asheville, NC MSA                              | 47                      | 213,629         | 22.0                  |
| Charleston, WV MSA                             | 55                      | 253,175         | 21.7                  |
| Fort Pierce-Port St. Lucie, FL MSA             | 64                      | 295,118         | 21.7                  |
| Kenosha, WI PMSA                               | 31                      | 144,339         | 21.5                  |
| Roanoke, VA MSA                                | 48                      | 227,828         | 21.1                  |
| La Crosse, WI-MN MSA                           | 25                      | 121,832         | 20.5                  |

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| Sarasota-Bradenton, FL MSA                    | 111                     | 543,082         | 20.4                  |
| New York, NY PMSA                             | 1749                    | 8,692,782       | 20.1                  |
| Greensboro--Winston-Salem--High Point, NC MSA | 234                     | 1,167,629       | 20.0                  |
| Lafayette, LA MSA                             | 74                      | 375,718         | 19.7                  |
| Sacramento, CA PMSA                           | 289                     | 1,531,963       | 18.9                  |
| Charlotte-Gastonia-Rock Hill, NC-SC MSA       | 257                     | 1,383,080       | 18.6                  |
| Columbia, MO MSA                              | 24                      | 129,098         | 18.6                  |
| Fort Worth-Arlington, TX PMSA                 | 297                     | 1,592,577       | 18.6                  |
| Erie, PA MSA                                  | 51                      | 276,401         | 18.5                  |
| Sherman-Denison, TX MSA                       | 19                      | 102,815         | 18.5                  |
| Springfield, MA NECMA                         | 109                     | 588,993         | 18.5                  |
| Wilmington, NC MSA                            | 40                      | 218,248         | 18.3                  |
| Greenville, NC MSA                            | 23                      | 126,630         | 18.2                  |
| Missoula, MT MSA                              | 16                      | 88,989          | 18.0                  |
| Williamsport, PA MSA                          | 21                      | 117,308         | 17.9                  |
| Portland, ME NECMA                            | 45                      | 253,582         | 17.7                  |
| Naples, FL MSA                                | 35                      | 199,436         | 17.5                  |
| Bloomington, IN MSA                           | 20                      | 115,130         | 17.4                  |
| Sioux City, IA-NE MSA                         | 21                      | 120,464         | 17.4                  |
| Evansville-Henderson, IN-KY MSA               | 49                      | 290,757         | 16.9                  |
| Tampa-St. Petersburg-Clearwater, FL MSA       | 382                     | 2,256,559       | 16.9                  |
| Fargo-Moorhead, ND-MN MSA                     | 28                      | 168,431         | 16.6                  |
| Flagstaff, AZ-UT MSA                          | 20                      | 120,371         | 16.6                  |
| Glens Falls, NY MSA                           | 20                      | 121,742         | 16.4                  |
| Sharon, PA MSA                                | 20                      | 121,938         | 16.4                  |
| Punta Gorda, FL MSA                           | 22                      | 134,899         | 16.3                  |
| Medford-Ashland, OR MSA                       | 28                      | 173,123         | 16.2                  |
| Bremerton, WA PMSA                            | 37                      | 232,623         | 15.9                  |
| Jamestown, NY MSA                             | 22                      | 138,103         | 15.9                  |
| Fort Myers-Cape Coral, FL MSA                 | 62                      | 392,895         | 15.8                  |
| Green Bay, WI MSA                             | 34                      | 215,373         | 15.8                  |
| Bloomington-Normal, IL MSA                    | 22                      | 142,652         | 15.4                  |
| Wausau, WI MSA                                | 19                      | 123,223         | 15.4                  |
| Utica-Rome, NY MSA                            | 45                      | 294,677         | 15.3                  |
| Florence, SC MSA                              | 19                      | 124,904         | 15.2                  |
| Orlando, FL MSA                               | 229                     | 1,504,569       | 15.2                  |
| Wichita, KS MSA                               | 82                      | 544,343         | 15.1                  |
| Auburn-Opelika, AL MSA                        | 15                      | 100,444         | 14.9                  |
| Dubuque, IA MSA                               | 13                      | 87,806          | 14.8                  |

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|--|-------------------------|-----------------|-----------------------|
| Youngstown-Warren, OH MSA                | 85                      | 591,752         | 14.4                  |
| Hickory-Morganton-Lenoir, NC MSA         | 46                      | 322,608         | 14.3                  |
| Jersey City, NJ PMSA                     | 79                      | 557,159         | 14.2                  |
| Davenport-Moline-Rock Island, IA-IL MSA  | 50                      | 357,813         | 14.0                  |
| Flint, MI PMSA                           | 61                      | 436,084         | 14.0                  |
| Charleston-North Charleston, SC MSA      | 75                      | 541,159         | 13.9                  |
| Kansas City, MO-KS MSA                   | 240                     | 1,737,025       | 13.8                  |
| Tallahassee, FL MSA                      | 36                      | 261,021         | 13.8                  |
| Jacksonville, FL MSA                     | 141                     | 1,044,684       | 13.5                  |
| Memphis, TN-AR-MS MSA                    | 145                     | 1,093,427       | 13.3                  |
| Columbia, SC MSA                         | 67                      | 512,316         | 13.1                  |
| Richmond-Petersburg, VA MSA              | 125                     | 957,032         | 13.1                  |
| Scranton--Wilkes-Barre--Hazleton, PA MSA | 80                      | 615,491         | 13.0                  |
| San Antonio, TX MSA                      | 197                     | 1,538,338       | 12.8                  |
| Casper, WY MSA                           | 8                       | 63,341          | 12.6                  |
| Fayetteville-Springdale-Rogers, AR MSA   | 34                      | 272,616         | 12.5                  |
| Oklahoma City, OK MSA                    | 130                     | 1,038,999       | 12.5                  |
| Salinas, CA MSA                          | 45                      | 365,605         | 12.3                  |
| St. Cloud, MN MSA                        | 20                      | 162,222         | 12.3                  |
| Vallejo-Fairfield-Napa, CA PMSA          | 61                      | 496,703         | 12.3                  |
| Anchorage, AK MSA                        | 31                      | 254,982         | 12.2                  |
| Spokane, WA MSA                          | 50                      | 408,669         | 12.2                  |
| Joplin, MO MSA                           | 18                      | 148,684         | 12.1                  |
| Louisville, KY-IN MSA                    | 121                     | 999,267         | 12.1                  |
| Omaha, NE-IA MSA                         | 84                      | 693,900         | 12.1                  |
| Longview-Marshall, TX MSA                | 25                      | 208,988         | 12.0                  |
| Jackson, TN MSA                          | 12                      | 100,654         | 11.9                  |
| Tyler, TX MSA                            | 20                      | 168,783         | 11.8                  |
| Waterloo-Cedar Falls, IA MSA             | 14                      | 121,121         | 11.6                  |
| Dayton-Springfield, OH MSA               | 54                      | 470,864         | 11.5                  |
| Chattanooga, TN-GA MSA                   | 51                      | 450,283         | 11.3                  |
| Chico-Paradise, CA MSA                   | 22                      | 194,597         | 11.3                  |
| Riverside-San Bernardino, CA PMSA        | 353                     | 3,114,072       | 11.3                  |
| Grand Forks, ND-MN MSA                   | 11                      | 97,823          | 11.2                  |
| Nashville, TN MSA                        | 129                     | 1,156,225       | 11.2                  |
| Ocala, FL MSA                            | 27                      | 241,513         | 11.2                  |
| Salem, OR PMSA                           | 37                      | 330,101         | 11.2                  |
| Sioux Falls, SD MSA                      | 18                      | 163,422         | 11.0                  |
| Jackson, MS MSA                          | 47                      | 429,614         | 10.9                  |

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|--|-------------------------|-----------------|-----------------------|
| Kankakee, IL PMSA                              | 11                      | 102,107         | 10.8                  |
| Terre Haute, IN MSA                            | 16                      | 148,628         | 10.8                  |
| Las Vegas, NV-AZ MSA                           | 141                     | 1,321,546       | 10.7                  |
| Miami, FL PMSA                                 | 231                     | 2,152,437       | 10.7                  |
| Lubbock, TX MSA                                | 24                      | 229,475         | 10.5                  |
| Mobile, AL MSA                                 | 56                      | 532,257         | 10.5                  |
| Springfield, MO MSA                            | 32                      | 304,863         | 10.5                  |
| Steubenville-Weirton, OH-WV MSA                | 14                      | 134,535         | 10.4                  |
| Bakersfield, CA MSA                            | 65                      | 631,459         | 10.3                  |
| Hagerstown, MD PMSA                            | 13                      | 127,352         | 10.2                  |
| New Orleans, LA MSA                            | 131                     | 1,309,445       | 10.0                  |
| Mansfield, OH MSA                              | 17                      | 174,559         | 9.7                   |
| Yakima, WA MSA                                 | 21                      | 218,062         | 9.6                   |
| Florence, AL MSA                               | 13                      | 137,271         | 9.5                   |
| Houma, LA MSA                                  | 18                      | 193,858         | 9.3                   |
| Johnstown, PA MSA                              | 22                      | 236,347         | 9.3                   |
| Norfolk-Virginia Beach-Newport News, VA-NC MSA | 143                     | 1,542,143       | 9.3                   |
| Atlantic-Cape May, NJ PMSA                     | 31                      | 336,116         | 9.2                   |
| Amarillo, TX MSA                               | 19                      | 208,607         | 9.1                   |
| Decatur, AL MSA                                | 13                      | 142,816         | 9.1                   |
| Topeka, KS MSA                                 | 15                      | 165,348         | 9.1                   |
| Dothan, AL MSA                                 | 12                      | 134,749         | 8.9                   |
| Dover, DE MSA                                  | 11                      | 124,089         | 8.9                   |
| Fort Walton Beach, FL MSA                      | 15                      | 169,289         | 8.9                   |
| Las Cruces, NM MSA                             | 15                      | 169,165         | 8.9                   |
| Beaumont-Port Arthur, TX MSA                   | 33                      | 375,564         | 8.8                   |
| Gary, IN PMSA                                  | 55                      | 624,049         | 8.8                   |
| Birmingham, AL MSA                             | 79                      | 908,508         | 8.7                   |
| Muncie, IN MSA                                 | 10                      | 116,828         | 8.6                   |
| Myrtle Beach, SC MSA                           | 15                      | 174,762         | 8.6                   |
| Odessa-Midland, TX MSA                         | 21                      | 245,376         | 8.6                   |
| Corpus Christi, TX MSA                         | 33                      | 387,733         | 8.5                   |
| Redding, CA MSA                                | 14                      | 164,349         | 8.5                   |
| Wheeling, WV-OH MSA                            | 13                      | 152,903         | 8.5                   |
| Lakeland-Winter Haven, FL MSA                  | 38                      | 452,584         | 8.4                   |
| Augusta-Aiken, GA-SC MSA                       | 38                      | 458,271         | 8.3                   |
| Little Rock-North Little Rock, AR MSA          | 46                      | 556,295         | 8.3                   |
| Pensacola, FL MSA                              | 33                      | 399,625         | 8.3                   |
| Fort Smith, AR-OK MSA                          | 16                      | 194,045         | 8.2                   |

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| Modesto, CA MSA                       | 35                      | 426,460         | 8.2                   |
| Duluth-Superior, MN-WI MSA            | 19                      | 236,464         | 8.0                   |
| Stockton-Lodi, CA MSA                 | 44                      | 550,445         | 8.0                   |
| Wichita Falls, TX MSA                 | 11                      | 137,237         | 8.0                   |
| Alexandria, LA MSA                    | 10                      | 126,763         | 7.9                   |
| Lake Charles, LA MSA                  | 14                      | 180,330         | 7.8                   |
| Springfield, IL MSA                   | 16                      | 203,847         | 7.8                   |
| Cheyenne, WY MSA                      | 6                       | 78,872          | 7.6                   |
| Olympia, WA PMSA                      | 15                      | 202,255         | 7.4                   |
| Killeen-Temple, TX MSA                | 22                      | 301,449         | 7.3                   |
| Hattiesburg, MS MSA                   | 8                       | 111,252         | 7.2                   |
| Macon, GA MSA                         | 23                      | 319,502         | 7.2                   |
| Tacoma-WA PMSA                        | 49                      | 676,505         | 7.2                   |
| Grand Junction, CO MSA                | 8                       | 112,891         | 7.1                   |
| Savannah, GA MSA                      | 19                      | 285,508         | 6.7                   |
| Shreveport-Bossier City, LA MSA       | 25                      | 378,641         | 6.6                   |
| St. Joseph, MO MSA                    | 6                       | 97,338          | 6.2                   |
| Altoona, PA MSA                       | 8                       | 130,615         | 6.1                   |
| Fresno, CA MSA                        | 53                      | 870,478         | 6.1                   |
| Huntington-Ashland, WV-KY-OH MSA      | 19                      | 313,922         | 6.1                   |
| Monroe, LA MSA                        | 9                       | 146,979         | 6.1                   |
| Lewiston-Auburn, ME NECMA             | 6                       | 101,280         | 5.9                   |
| Waco, TX MSA                          | 12                      | 203,446         | 5.9                   |
| Lima, OH MSA                          | 9                       | 154,242         | 5.8                   |
| Biloxi-Gulfport-Pascagoula, MS MSA    | 20                      | 349,218         | 5.7                   |
| Bangor, ME NECMA                      | 8                       | 142,323         | 5.6                   |
| Danville, VA MSA                      | 6                       | 108,252         | 5.5                   |
| Honolulu, HI MSA                      | 47                      | 872,478         | 5.4                   |
| Montgomery, AL MSA                    | 17                      | 321,781         | 5.3                   |
| Great Falls, MT MSA                   | 4                       | 78,983          | 5.1                   |
| Clarksville-Hopkinsville, TN-KY MSA   | 10                      | 199,758         | 5.0                   |
| San Angelo, TX MSA                    | 5                       | 102,775         | 4.9                   |
| Victoria, TX MSA                      | 4                       | 82,650          | 4.8                   |
| Sumter, SC MSA                        | 5                       | 107,127         | 4.7                   |
| Pueblo, CO MSA                        | 6                       | 134,867         | 4.4                   |
| Vineland-Millville-Bridgeton, NJ PMSA | 6                       | 140,341         | 4.3                   |
| Albany, GA MSA                        | 5                       | 118,076         | 4.2                   |
| Billings, MT MSA                      | 5                       | 126,158         | 4.0                   |
| Merced, CA MSA                        | 8                       | 197,730         | 4.0                   |

| Metro Area Name                    | Utility Patents Granted | Population 1998 | Patents per 100K pop. |
|------------------------------------|-------------------------|-----------------|-----------------------|
| Pocatello, ID MSA                  | 3                       | 74,866          | 4.0                   |
| Jonesboro, AR MSA                  | 3                       | 77,500          | 3.9                   |
| Visalia-Tulare-Porterville, CA MSA | 14                      | 355,240         | 3.9                   |
| Yuma, AZ MSA                       | 5                       | 132,259         | 3.8                   |
| El Paso, TX MSA                    | 25                      | 703,127         | 3.6                   |
| Fayetteville, NC MSA               | 10                      | 284,629         | 3.5                   |
| Lawton, OK MSA                     | 4                       | 113,508         | 3.5                   |
| Abilene, TX MSA                    | 4                       | 122,016         | 3.3                   |
| Bismarck, ND MSA                   | 3                       | 91,442          | 3.3                   |
| Columbus, GA-AL MSA                | 9                       | 272,133         | 3.3                   |
| Cumberland, MD-WV MSA              | 3                       | 98,070          | 3.1                   |
| Jacksonville, NC MSA               | 4                       | 142,358         | 2.8                   |
| Goldsboro, NC MSA                  | 3                       | 112,227         | 2.7                   |

| Metro Area Name                          | Utility Patents Granted | Population 1998 | Patents per 100K pop. |
|--|-------------------------|-----------------|-----------------------|
| Rocky Mount, NC MSA                      | 4                       | 146,167         | 2.7                   |
| Anniston, AL MSA                         | 3                       | 117,018         | 2.6                   |
| Tuscaloosa, AL MSA                       | 4                       | 160,768         | 2.5                   |
| Texarkana, TX-Texarkana, AR MSA          | 3                       | 123,366         | 2.4                   |
| Rapid City, SD MSA                       | 2                       | 87,702          | 2.3                   |
| Owensboro, KY MSA                        | 2                       | 91,139          | 2.2                   |
| Yuba City, CA MSA                        | 3                       | 137,043         | 2.2                   |
| Brownsville-Harlingen-San Benito, TX MSA | 6                       | 326,449         | 1.8                   |
| Enid, OK MSA                             | 1                       | 56,859          | 1.8                   |
| Laredo, TX MSA                           | 3                       | 188,166         | 1.6                   |
| Pine Bluff, AR MSA                       | 1                       | 81,556          | 1.2                   |
| Gadsden, AL MSA                          | 1                       | 103,975         | 1.0                   |
| McAllen-Edinburg-Mission, TX MSA         | 5                       | 522,204         | 1.0                   |