

**Table 4. Number of UTILITY Patents Granted per 100,000 Population, by Metropolitan Area, 1998
(Independent Inventors Only)**

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.
Reno, NV MSA	63	313,660	20.1	Lawrence, KS MSA	9	93,137	9.7
San Jose, CA PMSA	318	1,641,215	19.4	Boise City, ID MSA	38	395,953	9.6
Bellingham, WA MSA	26	156,830	16.6	Bergen-Passaic, NJ PMSA	128	1,344,266	9.5
Orange County, CA PMSA	448	2,721,701	16.5	Fort Pierce-Port St. Lucie, FL MSA	28	295,118	9.5
West Palm Beach-Boca Raton, FL MSA	168	1,032,625	16.3	Minneapolis-St. Paul, MN-WI MSA	266	2,831,234	9.4
Boulder-Longmont, CO PMSA	42	267,274	15.7	Monmouth-Ocean, NJ PMSA	103	1,093,253	9.4
Santa Barbara-Santa Maria-Lompoc, CA MSA	56	389,502	14.4	Denver, CO PMSA	181	1,938,642	9.3
San Francisco, CA PMSA	239	1,683,309	14.2	Sheboygan, WI MSA	10	110,170	9.1
Corvallis, OR MSA	11	77,755	14.1	Fort Lauderdale, FL PMSA	134	1,503,407	8.9
San Luis Obispo-Atascadero-Paso Robles, CA MSA	31	234,366	13.2	Los Angeles-Long Beach, CA PMSA	816	9,213,533	8.9
Santa Fe, NM MSA	18	141,730	12.7	Salt Lake City-Ogden, UT MSA	113	1,267,745	8.9
Naples, FL MSA	25	199,436	12.5	Oakland, CA PMSA	204	2,318,522	8.8
Santa Cruz-Watsonville, CA PMSA	30	242,994	12.3	Boston-Worcester-Lawrence-Lowell-			
Lafayette, LA MSA	45	375,718	12.0	Brockton, MA-NH NECMA	503	5,867,187	8.6
Sarasota-Bradenton, FL MSA	65	543,082	12.0	Gainesville, FL MSA	17	198,662	8.6
Punta Gorda, FL MSA	16	134,899	11.9	Provo-Orem, UT MSA	29	335,635	8.6
New Haven-Bridgeport-Stamford-Danbury-				Tallahassee, FL MSA	22	261,021	8.4
Waterbury, CT NECMA	192	1,631,866	11.8	Houston, TX PMSA	328	3,931,688	8.3
Trenton, NJ PMSA	39	331,629	11.8	Austin-San Marcos, TX MSA	91	1,105,909	8.2
Nassau-Suffolk, NY PMSA	310	2,673,489	11.6	Phoenix-Mesa, AZ MSA	236	2,931,004	8.1
Eugene-Springfield, OR MSA	36	314,068	11.5	Santa Rosa, CA PMSA	35	433,304	8.1
San Diego, CA MSA	315	2,780,592	11.3	Detroit, MI PMSA	354	4,473,853	7.9
Middlesex-Somerset-Hunterdon, NJ PMSA	126	1,121,504	11.2	Fort Myers-Cape Coral, FL MSA	31	392,895	7.9
Ventura, CA PMSA	81	731,967	11.1	Tampa-St. Petersburg-Clearwater, FL MSA	178	2,256,559	7.9
Brazoria, TX PMSA	24	230,335	10.4	Philadelphia, PA-NJ PMSA	388	4,946,562	7.8
Yolo, CA PMSA	16	153,849	10.4	Chico-Paradise, CA MSA	15	194,597	7.7
Barnstable-Yarmouth, MA NECMA	21	208,418	10.1	Seattle-Bellevue-Everett, WA PMSA	175	2,312,978	7.6
Missoua, MT MSA	9	88,989	10.1	Tucson, AZ MSA	60	790,755	7.6
Ann Arbor, MI PMSA	55	547,646	10.0	Asheville, NC MSA	16	213,629	7.5
Medford-Ashland, OR MSA	17	173,123	9.8	Greeley, CO PMSA	12	159,429	7.5
Pittsfield, MA NECMA	10	133,038	7.5	Panama City, FL MSA	9	146,999	6.1

Utility (independent inventors)

Metro Area Name	Utility Patents Granted	Population 1998	Patents per 100K pop.
Sioux City, IA-NE MSA	9	120,464	7.5
Washington, DC-MD-VA-WV PMSA	352	4,673,902	7.5
Fort Collins-Loveland, CO MSA	17	231,221	7.4
Milwaukee-Waukesha, WI PMSA	108	1,459,805	7.4
Sharon, PA MSA	9	121,938	7.4
Baltimore, MD PMSA	180	2,483,952	7.2
Chicago, IL PMSA	572	7,939,351	7.2
Hartford, CT NECMA	80	1,110,065	7.2
Dallas, TX PMSA	228	3,209,886	7.1
Fargo-Moorhead, ND-MN MSA	12	168,431	7.1
Fort Walton Beach, FL MSA	12	169,289	7.1
Newark, NJ PMSA	138	1,952,407	7.1
Richland-Kennewick-Pasco, WA MSA	13	182,709	7.1
Baton Rouge, LA MSA	40	575,129	7.0
Jersey City, NJ PMSA	39	557,159	7.0
Portland-Vancouver, OR-WA PMSA	128	1,818,955	7.0
New London-Norwich, CT NECMA	17	245,740	6.9
Knoxville, TN MSA	45	659,074	6.8
Anchorage, AK MSA	17	254,982	6.7
Charlottesville, VA MSA	10	149,190	6.7
Houma, LA MSA	13	193,858	6.7
Albuquerque, NM MSA	45	678,633	6.6
Allentown-Bethlehem-Easton, PA MSA	41	616,877	6.6
Cedar Rapids, IA MSA	12	182,651	6.6
Champaign-Urbana, IL MSA	11	167,788	6.6
Florence, AL MSA	9	137,271	6.6
Glens Falls, NY MSA	8	121,742	6.6
Atlanta, GA MSA	242	3,746,059	6.5
New York, NY PMSA	559	8,692,782	6.4
Rockford, IL MSA	23	356,887	6.4
Toledo, OH MSA	39	609,935	6.4
Tulsa, OK MSA	50	776,906	6.4
Johnson City-Kingsport-Bristol, TN-VA MSA	29	462,345	6.3
Erie, PA MSA	17	276,401	6.2
Huntsville, AL MSA	21	340,428	6.2
Orlando, FL MSA	94	1,504,569	6.2
Grand Forks, ND-MN MSA	6	97,823	6.1
Lubbock, TX MSA	14	229,475	6.1
Portland, ME NECMA	13	253,582	5.1

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Dutchess County, NY PMSA	16	265,317	6.0
New Orleans, LA MSA	78	1,309,445	6.0
Williamsport, PA MSA	7	117,308	6.0
Wilmington-Newark, DE-MD PMSA	34	565,329	6.0
Cleveland-Lorain-Elyria, OH PMSA	131	2,222,731	5.9
Kankakee, IL PMSA	6	102,107	5.9
Raleigh-Durham-Chapel Hill, NC MSA	64	1,079,873	5.9
Las Vegas, NV-AZ MSA	77	1,321,546	5.8
Mobile, AL MSA	31	532,257	5.8
Charlotte-Gastonia-Rock Hill, NC-SC MSA	79	1,383,080	5.7
Cincinnati, OH-KY-IN PMSA	92	1,617,836	5.7
Lancaster, PA MSA	26	456,414	5.7
St. Louis, MO-IL MSA	146	2,563,801	5.7
Wausau, WI MSA	7	123,223	5.7
Bangor, ME NECMA	8	142,323	5.6
Bremerton, WA PMSA	13	232,623	5.6
Greenville-Spartanburg-Anderson, SC MSA	51	918,351	5.6
Springfield, MO MSA	17	304,863	5.6
Alexandria, LA MSA	7	126,763	5.5
Dayton-Springfield, OH MSA	26	470,864	5.5
Pensacola, FL MSA	22	399,625	5.5
Redding, CA MSA	9	164,349	5.5
Wilmington, NC MSA	12	218,248	5.5
Jacksonville, FL MSA	56	1,044,684	5.4
Racine, WI PMSA	10	186,119	5.4
South Bend, IN MSA	14	258,088	5.4
Spokane, WA MSA	22	408,669	5.4
Columbia, SC MSA	27	512,316	5.3
Des Moines, IA MSA	23	436,922	5.3
Grand Junction, CO MSA	6	112,891	5.3
Akron, OH PMSA	36	688,952	5.2
Madison, WI MSA	22	424,586	5.2
Sacramento, CA PMSA	79	1,531,963	5.2
Saginaw-Bay City-Midland, MI MSA	21	401,991	5.2
Scranton--Wilkes-Barre--Hazleton, PA MSA	32	615,491	5.2
Lansing-East Lansing, MI MSA	23	449,683	5.1
Myrtle Beach, SC MSA	9	174,762	5.1
Pittsburgh, PA MSA	120	2,346,153	5.1
Jamestown, NY MSA	6	138,103	4.3

Utility (independent inventors)

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Kokomo, IN MSA	5	100,176	5.0
Riverside-San Bernardino, CA PMSA	157	3,114,072	5.0
Syracuse, NY MSA	37	734,640	5.0
Appleton-Oshkosh-Neenah, WI MSA	17	344,464	4.9
Bakersfield, CA MSA	31	631,459	4.9
Newburgh, NY-PA PMSA	18	369,392	4.9
Rochester, NY MSA	53	1,081,883	4.9
Springfield, IL MSA	10	203,847	4.9
Fayetteville-Springdale-Rogers, AR MSA	13	272,616	4.8
Lynchburg, VA MSA	10	208,039	4.8
Burlington, VT NECMA	9	192,895	4.7
Duluth-Superior, MN-WI MSA	11	236,464	4.7
Johnstown, PA MSA	11	236,347	4.7
Lincoln, NE MSA	11	235,589	4.7
Melbourne-Titusville-Palm Bay, FL MSA	22	466,093	4.7
Parkersburg-Marietta, WV-OH MSA	7	150,181	4.7
Youngstown-Warren, OH MSA	28	591,752	4.7
Altoona, PA MSA	6	130,615	4.6
Biloxi-Gulfport-Pascagoula, MS MSA	16	349,218	4.6
Fort Wayne, IN MSA	22	481,191	4.6
Miami, FL PMSA	99	2,152,437	4.6
Omaha, NE-IA MSA	32	693,900	4.6
Salinas, CA MSA	17	365,605	4.6
Vallejo-Fairfield-Napa, CA PMSA	23	496,703	4.6
Yakima, WA MSA	10	218,062	4.6
Daytona Beach, FL MSA	43	948,522	4.5
Greensboro--Winston-Salem--High Point, NC MSA	53	1,167,629	4.5
Kansas City, MO-KS MSA	78	1,737,025	4.5
State College, PA MSA	6	132,700	4.5
Albany-Schenectady-Troy, NY MSA	38	871,604	4.4
Decatur, IL MSA	5	113,772	4.4
Indianapolis, IN MSA	67	1,519,194	4.4
Lakeland-Winter Haven, FL MSA	20	452,584	4.4
Olympia, WA PMSA	9	202,255	4.4
Roanoke, VA MSA	10	227,828	4.4
Athens, GA MSA	6	138,679	4.3
Bloomington, IN MSA	5	115,130	4.3
Grand Rapids-Muskegon-Holland, MI MSA	45	1,037,933	4.3

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Kalamazoo-Battle Creek, MI MSA	19	446,331	4.3
Louisville, KY-IN MSA	43	999,267	4.3
Oklahoma City, OK MSA	45	1,038,999	4.3
Sioux Falls, SD MSA	7	163,422	4.3
St. Cloud, MN MSA	7	162,222	4.3
Bloomington-Normal, IL MSA	6	142,652	4.2
Providence-Warwick-Pawtucket, RI NECMA	38	905,612	4.2
Springfield, MA NECMA	25	588,993	4.2
Topeka, KS MSA	7	165,348	4.2
Galveston-Texas City TX PMSA	10	245,556	4.1
Tyler, TX MSA	7	168,783	4.1
Binghamton, NY MSA	10	249,022	4.0
Florence, SC MSA	5	124,904	4.0
Fort Worth-Arlington, TX PMSA	62	1,592,577	3.9
Hagerstown, MD PMSA	5	127,352	3.9
Lewiston-Auburn, ME NECMA	4	101,280	3.9
Reading, PA MSA	14	355,956	3.9
San Antonio, TX MSA	60	1,538,338	3.9
Sherman-Denison, TX MSA	4	102,815	3.9
Wichita, KS MSA	21	544,343	3.9
Buffalo-Niagra Falls, NY MSA	44	1,152,541	3.8
Cheyenne, WY MSA	3	78,872	3.8
Great Falls, MT MSA	3	78,983	3.8
Jackson, MI MSA	6	156,157	3.8
Longview-Marshall, TX MSA	8	208,988	3.8
Canton-Massillon, OH MSA	15	402,207	3.7
Dothan, AL MSA	5	134,749	3.7
Flint, MI PMSA	16	436,084	3.7
Harrisburg-Lebanon-Carlisle, PA MSA	23	616,031	3.7
Hickory-Morganton-Lenoir, NC MSA	12	322,608	3.7
Nashville, TN MSA	42	1,156,225	3.6
Charleston-North Charleston, SC MSA	19	541,159	3.5
Eau Claire, WI MSA	5	143,861	3.5
Jackson, MS MSA	15	429,614	3.5
Kenosha, WI PMSA	5	144,339	3.5
Las Cruces, NM MSA	6	169,165	3.5
Peoria-Pekin, IL MSA	12	344,779	3.5
York, PA MSA	13	373,255	3.5

Utility (independent inventors)

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Albany, GA MSA	4	118,076	3.4
Davenport-Moline-Rock Island, IA-IL MSA	12	357,813	3.4
Honolulu, HI MSA	30	872,478	3.4
Mansfield, OH MSA	6	174,559	3.4
Monroe, LA MSA	5	146,979	3.4
Atlantic-Cape May, NJ PMSA	11	336,116	3.3
Augusta-Aiken, GA-SC MSA	15	458,271	3.3
Columbus, OH MSA	49	1,469,604	3.3
Janesville-Beloit, WI MSA	5	150,736	3.3
Salem, OR PMSA	11	330,101	3.3
Casper, WY MSA	2	63,341	3.2
Charleston, WV MSA	8	253,175	3.2
Gary, IN PMSA	20	624,049	3.2
Greenville, NC MSA	4	126,630	3.2
Richmond-Petersburg, VA MSA	31	957,032	3.2
Shreveport-Bossier City, LA MSA	12	378,641	3.2
Corpus Christi, TX MSA	12	387,733	3.1
Auburn-Opelika, AL MSA	3	100,444	3.0
Bryan-College Station, TX MSA	4	133,407	3.0
Fresno, CA MSA	26	870,478	3.0
Steubenville-Weirton, OH-WV MSA	4	134,535	3.0
Amarillo, TX MSA	6	208,607	2.9
Beaumont-Port Arthur, TX MSA	11	375,564	2.9
Elkhart-Goshen, IN MSA	5	172,310	2.9
Huntington-Ashland, WV-KY-OH MSA	9	313,922	2.9
Iowa City, IA MSA	3	102,724	2.9
Lafayette, IN MSA	5	172,220	2.9
Little Rock-North Little Rock, AR MSA	16	556,295	2.9
Ocala, FL MSA	7	241,513	2.9
Odessa-Midland, TX MSA	7	245,376	2.9
Stockton-Lodi, CA MSA	16	550,445	2.9
Waco, TX MSA	6	203,446	2.9
Wichita Falls, TX MSA	4	137,237	2.9
Green Bay, WI MSA	6	215,373	2.8
Lake Charles, LA MSA	5	180,330	2.8
Montgomery, AL MSA	9	321,781	2.8
Tacoma-WA PMSA	19	676,505	2.8
Hamilton-Middletown, OH PMSA	9	330,428	2.7
Joplin, MO MSA	4	148,684	2.7

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Killeen-Temple, TX MSA	8	301,449	2.7
Lexington, KY MSA	12	449,645	2.7
Rocky Mount, NC MSA	4	146,167	2.7
Utica-Rome, NY MSA	8	294,677	2.7
Memphis, TN-AR-MS MSA	28	1,093,427	2.6
Modesto, CA MSA	11	426,460	2.6
Flagstaff, AZ-UT MSA	3	120,371	2.5
La Crosse, WI-MN MSA	3	121,832	2.5
Savannah, GA MSA	7	285,508	2.5
Waterloo-Cedar Falls, IA MSA	3	121,121	2.5
Billings, MT MSA	3	126,158	2.4
Birmingham, AL MSA	22	908,508	2.4
Chattanooga, TN-GA MSA	11	450,283	2.4
Evansville-Henderson, IN-KY MSA	7	290,757	2.4
Norfolk-Virginia Beach-Newport News, VA-NC MSA	37	1,542,143	2.4
Texarkana, TX-Texarkana, AR MSA	3	123,366	2.4
Columbia, MO MSA	3	129,098	2.3
Dubuque, IA MSA	2	87,806	2.3
Yuma, AZ MSA	3	132,259	2.3
Bismarck, ND MSA	2	91,442	2.2
Elmira, NY MSA	2	92,021	2.2
Decatur, AL MSA	3	142,816	2.1
Fort Smith, AR-OK MSA	4	194,045	2.1
Jacksonville, NC MSA	3	142,358	2.1
Clarksville-Hopkinsville, TN-KY MSA	4	199,758	2.0
Colorado Springs, CO MSA	10	490,378	2.0
Merced, CA MSA	4	197,730	2.0
Terre Haute, IN MSA	3	148,628	2.0
Lima, OH MSA	3	154,242	1.9
Enid, OK MSA	1	56,859	1.8
Fayetteville, NC MSA	5	284,629	1.8
Lawton, OK MSA	2	113,508	1.8
Visalia-Tulare-Porterville, CA MSA	6	355,240	1.7
Abilene, TX MSA	2	122,016	1.6
Columbus, GA-AL MSA	4	272,133	1.5
Pueblo, CO MSA	2	134,867	1.5
Yuba City, CA MSA	2	137,043	1.5
El Paso, TX MSA	10	703,127	1.4
Jonesboro, AR MSA	1	77,500	1.3

Utility (independent inventors)

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Macon, GA MSA	4	319,502	1.3
Benton Harbor, MI MSA	2	160,245	1.2
Pine Bluff, AR MSA	1	81,556	1.2
Tuscaloosa, AL MSA	2	160,768	1.2
Owensboro, KY MSA	1	91,139	1.1
Rapid City, SD MSA	1	87,702	1.1
Cumberland, MD-WV MSA	1	98,070	1.0
Jackson, TN MSA	1	100,654	1.0
San Angelo, TX MSA	1	102,775	1.0
St. Joseph, MO MSA	1	97,338	1.0
Anniston, AL MSA	1	117,018	0.9
Danville, VA MSA	1	108,252	0.9
Sumter, SC MSA	1	107,127	0.9

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Dover, DE MSA	1	124,089	0.8
McAllen-Edinburg-Mission, TX MSA	4	522,204	0.8
Wheeling, WV-OH MSA	1	152,903	0.7
Brownsville-Harlingen-San Benito, TX MSA	2	326,449	0.6
Laredo, TX MSA	1	188,166	0.5
Gadsden, AL MSA	0	103,975	0.0
Goldsboro, NC MSA	0	112,227	0.0
Hattiesburg, MS MSA	0	111,252	0.0
Muncie, IN MSA	0	116,828	0.0
Pocatello, ID MSA	0	74,866	0.0
Rochester, MN MSA	0	116,702	0.0
Victoria, TX MSA	0	82,650	0.0
Vineland-Millville-Bridgeton, NJ PMSA	0	140,341	0.0

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