

Appendix table 5-65
Citation of S&E material in U.S. patents: 1987–2004

Year	All citations		Average citations per patent	
	S&E material	S&E articles	S&E material	S&E articles
1987.....	33,533	17,133	0.40	0.21
1988.....	36,140	19,107	0.46	0.25
1989.....	52,139	28,658	0.55	0.30
1990.....	52,292	29,506	0.58	0.33
1991.....	60,959	35,546	0.63	0.37
1992.....	70,902	42,879	0.73	0.44
1993.....	89,680	57,338	0.91	0.58
1994.....	99,062	60,997	0.97	0.60
1995.....	122,170	72,922	1.20	0.72
1996.....	159,803	103,330	1.46	0.94
1997.....	223,439	155,686	1.99	1.39
1998.....	311,689	220,080	2.11	1.49
1999.....	308,159	219,634	2.01	1.43
2000.....	310,393	220,215	1.97	1.40
2001.....	346,145	246,668	2.08	1.48
2002.....	360,548	248,783	2.15	1.49
2003.....	379,423	263,206	2.24	1.56
2004.....	349,606	233,294	2.13	1.42

NOTES: S&E material constitutes references to articles in all scientific journals and nonarticle materials such as reports, technical notes, and conference proceedings. S&E articles are in publications referenced by *Science Citation Index (SCI)* and *Social Sciences Citation Index (SSCI)*. Citation counts based on a 12-year period with 3-year lag, e.g., citations for 2004 are references in U.S. patents issued in 2004 to articles published in 1989–2001.

SOURCES: Thomson ISI, *SCI* and *SSCI*, <http://www.isinet.com/products/citation/>; iPLQ, Inc.; and National Science Foundation, Division of Science Resources Statistics, special tabulations.