

3.4 ROYALTIES FROM LICENSED ERIP TECHNOLOGIES

Estimates of royalties are available for 37 of the 39 inventions that have been sold through licensing agreements. In the remaining two cases, sales by the licensee were quite small and apparently did not involve any royalty payments to the inventor. In 21 cases, royalties were estimated by assuming a royalty rate equal to 5% of licensed sales. This estimation procedure was not applied to the three inventions with the largest estimated royalties (which account for 60% of total royalties), since these inventors provided estimates of their royalty income.

Over the duration of the Energy-Related Inventions Program, ERIP technologies have generated more than \$15 million in royalties (or the equivalent of \$18.6 million in 1992 dollars) for their inventors (Table 3.6). The time-line of inventions with royalties and royalty payments tracks the commercial progress of ERIP inventions, in general. Royalties were greatest between 1986 and 1990, reaching an all-time high of \$2.5 million (in 1992 dollars) in 1989. In 1991 and 1992, annual royalties averaged just over \$1 million.

**Table 3.7 Total Annual Royalties from Sales of 37 ERIP Technologies
(in thousands of dollars)**

Year	Number of Inventions With Royalties	Royalties (in thousands of current dollars)	Royalties (in thousands of 1992 dollars)
1980	7	683.3	1,163.4
1981	9	703.5	1,085.8
1982	9	881.2	1,281.2
1983	13	1,049.3	1,478.1
1984	13	506.0	683.3
1985	13	656.4	855.9
1986	12	1,341.4	1,717.1
1987	13	1,205.9	1,489.3
1988	21	1,898.8	2,251.9
1989	21	2,183.2	2,470.2
1990	21	1,841.0	1,976.2
1991	15	1,122.3	1,156.1
1992	16	1,023.2	1,023.2
Grand Totals	37	15,095.4	18,631.7