

meaning of invention, plus the sciences which feed most directly into it.

[380] The estimated totals from which the percentages are calculated in table 7 (§ 382) and elsewhere, are for funds supplied, 1953-54. \$5,652 million. The same total is assumed for percentage performance, where stated.

[381] The accuracy claimed is decidedly less than that betokened by the numbers of digits shown. The shortcomings of all social science statistics are explained in § 9-12.

[382]

TABLE 7. *The supports of invention and its researches*

[For 1953-54, in million dollars. Estimates, and in the repartition of columns 4-6, guesswork. (See § 9-12.) Line 9a, (in italic), for the laboratories of organized industry, is duplicated in parts of lines 6 and 13-15; hence line 9b, in roman, is subjoined for eliminating the duplications. In adding up the totals this line 9b is used. Explanations and sources are to be found in the numbered sections of this chapter. n.e.c. means those not elsewhere classified nor here set down. An * signifies frequent use of patents, a † of commercial secrecy.]

Supporting source (1)	Percent (2)	Total (3)	Government (4)	Business (5)	Philanthropy (6)
Total, unduplicated.....	-----	\$5,652	\$3,467.9	\$2,104.4	\$79.7
Percent.....	100	100	61.4	37.2	1.4
1. Federal funds, n.e.c.....	45.55	\$2,575.0	\$2,575.0	-----	-----
2. State funds, n.e.c.....	.16	9.3	9.3	-----	-----
3. Universities ⁷¹	.48	27.0	17.8	\$5.0	\$4.2
4. Professional societies.....	.05	2.8	-----	-----	2.8
5. Trade associations *†.....	.22	12.5	-----	5.0	7.5
6. Tax benefits.....	14.93	844.0	844.0	-----	-----
7. Foundations, etc.*†.....	.62	35.0	-----	-----	35.0
9a. <i>Organized industry</i> *†.....	51.00	2,890.0	-----	2,890.0	29.0
9b. Organized industry, less duplication *†.....	30.71	1,736.0	-----	1,716.0	20.0
10. Suggestion systems†.....	.60	34.0	5.6	28.4	-----
11. Unorganized inventors*†.....	1.95	110.0	-----	100.0	10.0
12. Awards.....	.01	.4	.2	-----	.2
13. Compulsory license*†.....	.58	33.0	16.0	17.0	-----
14. Patents pool and cross license*†.....	3.71	210.0	-----	210.0	-----
15. Know-how sales†.....	.41	23.0	-----	23.0	-----

PART A: THE OUTLAYS OR INVENTIVE COSTS FROM VARIOUS TYPES OF ORGANIZATION

[383] 1. The Federal Government:

1953-54, funds formally supplied⁸⁰⁰..... \$2,575 m(illion), 45.6%.
 Latest,⁸⁷⁰ 1962..... \$7,600 m.
 1953-54 general performance..... \$970 m., 17.2%.

The Federal Government in 1953-4 directly supplied about \$2,566 millions for the physical sciences only, including capital expenditures, but other large amounts indirectly through its subsidies to higher education, the patent system, pensions, and social security to research workers, and military intelligence, consular, and library services, and above all through the tax benefit reckoned under No. 6 below. The services to inquiring inventors and industrialists, of the Office of Technical Services (\$1.1 million in 1959), and what the patent system costs the Government (\$8 million, § 196), have been included in our Funds Supplied. The total Government contribution, which becomes \$3,468 million (table 7, col. 4) in fiscal 1954, when one adds the tax benefits, rewards, and part of compulsory license (secs.