(v) Apportionment of research and experimental expense to the statutory grouping of gross income (\$45,000×\$300,000/(\$500,000+\$400,000+\$300,000)): (vi) Total apportioned deduction for research and experimentation: (vii) Amount apportioned to the residual grouping (\$45,000+\$33,750): (viii) Amount apportioned to the statutory grouping:	\$11,250 \$90,000 \$78,750 \$11,250
(2) Tentative Apportionment on the Basis of Gross Income	
(i) Exclusive apportionment of research and experimental expense to the residual grouping of gross income (\$90,000×25 percent):	\$22,500
(ii) Research and experimental expense apportioned to sources within the United States (residual grouping) (\$67,500×\$190,000/(\$140,000+\$50,000+\$10,000)):	\$64,125
(iii) Research and experimental expense apportioned to sources within country Y (statutory grouping) (\$67,500×\$10,000/ (\$140,000+\$50,000+\$10,000)):	\$3,375
(iv) Amount apportioned to the residual grouping: (v) Amount apportioned to the statutory grouping:	\$86,625 \$3,375

(B) The total research and experimental expense apportioned to the statutory grouping (\$3,375) under the gross income method is 30 percent of the amount apportioned to the statutory grouping under the sales method. Thus, X may use option two of the gross income method (paragraph (d)(3) of this section) and apportion to the statutory grouping fifty percent (50%) of the \$11,250 apportioned to that grouping under the sales method. Thus, X apportions \$5,625 of research and experimental expense to the statutory grouping. X's use of the optional gross income methods will constitute a binding election to use the optional gross income methods for 1996 and four taxable years thereafter.

Example 3—(i) Facts. Assume the same facts as in Example 1 except that in 1997 X continues its sales of the new engines, with sales of \$600,000 in the United States and \$400,000 abroad by subsidiary Y. X also acquires a 60 percent (by value) ownership interest in foreign corporation Z and a 100 percent ownership interest in foreign corporation C. X transfers its engine technology to Z for a royalty equal to 5 percent of sales, and X enters into an arm's length cost-sharing arrangement with C to share the funding of all of X's research activity. In 1997, corporation Z has sales in country Z equal to \$1,000,000. X incurs expense of \$80,000 on research and experimentation in 1997, and in addition, X performs \$15,000 of research on gasoline

engines which was funded by the costsharing arrangement with C. All of Z's sales are from the product category, Engines and Turbines (SIC Industry Group 351). X performs all of its research in the United States and \$20,000 of its expenditure of \$80,000 is made solely to meet pollution standards mandated by law. X establishes, to the satisfaction of the Commissioner, that the expenditure in response to pollution standards is not expected to generate gross income (beyond *de minimis* amounts) outside the United States.

(ii) Allocation. The \$20,000 of research expense which X incurred in connection with pollution standards is definitely related and thus allocable to the residual grouping, gross income from sources within the United States. The remaining \$60,000 in research and experimental expenditure incurred by X is definitely related to all gasoline engines and is therefore allocable to the class of gross income to which the engines give rise, gross income from sales of gasoline engines in the United States, royalties from country Y, and royalties from country Z. No part of the \$60,000 research expense is allocable to dividends from country C, because corporation C has already paid, through its cost-sharing arrangement, for research activity performed by X which may benefit

(iii) Apportionment. For purposes of applying the foreign tax credit limitation, the statutory grouping is general limitation gross

income from sources without the United States, and the residual grouping is gross income from sources within the United States. X's deduction of \$60,000 for its research and experimental expenditure must be apportioned between these groupings. Because more than 50 percent of the research and experimentation was performed in the United States, 50 percent of the \$60,000 deduction can be apportioned exclusively to the residual grouping. The remaining 50 percent of the deduction can then be apportioned between the residual and the statutory grouping on the basis of sales of gasoline engines by X, Y, and Z. (If X utilized the optional gross income methods in 1996, then its use of such methods constituted a binding election to use the optional gross income methods in 1996 and for four taxable years thereafter. If X utilized the sales method in 1996, then its use of such method constituted a binding election to use the sales method in 1996 and for four taxable years thereafter.) The optional gross income methods are not illustrated in this Example 3 (see instead Examples 1 and 2). Since X has only a 60 percent ownership interest in corporation Z, only 60 percent of Z's sales (60% of \$1,000,000, or \$600,000) are included for purposes of apportionment. The allocation and apportionment for 1997 is as follows:

(A) X's total research expense: (B) Less: Legally mandated research directly allocated to the residual grouping of gross income: (C) Tentative apportionment on the basis of sales.	\$80,000 \$20,000
(1) Research and experimental expense to be apportioned between residual and statutory groupings of gross income:	\$60,000
(2) Less: Exclusive apportionment of research and experimental expense to the residual grouping of gross income (\$60,000×50 percent):	\$30.000
(3) Research and experimental expense to be apportioned between the residual and the statutory groupings on the basis of	,,
sales:(4) Apportionment of research and experimental expense to gross income from sources within the United States (residual	\$30,000
grouping) (\$30,000×\$600,000/(\$600,000+\$400,000+\$600,000)):	\$11,250
grouping) (\$30,000×\$400,000+\$600,000/(\$600,000+\$400,000+\$600,000)):	\$18,750
(6) Total apportioned deduction for research and experimentation (\$30,000+\$30,000):	\$60,000
(7) Amount apportioned to the residual grouping (\$30,000+\$11,250):	\$41,250
(8) Amount apportioned to the statutory grouping of gross income from sources within countries Y and Z:	\$18,750

Example 4—Research and Experimentation—(i) Facts. X, a domestic corporation, manufactures and sells forklift trucks and other types of materials handling equipment in the United States. The manufacture and sale of forklift trucks and

other materials handling equipment belongs to the product category, Construction, Mining, and Materials Handling Machinery and Equipment (SIC Industry Group 353). X also sells its forklift trucks to a wholesaling subsidiary located in foreign country Y (but title passes in the United States), and X manufactures forklift trucks in foreign country Z. The wholesaling of forklift trucks to country Y also belongs to X's product category Transportation equipment and, therefore, may not belong to the product