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Income, Cash, And Lost Profits Damages Awards In Patent Infringement Cases

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I. Introduction

The proper treatment of incremental income taxes in the computation of lost profits damages awards has been extensively analyzed by John Jarosz.¹ Jarosz has applied his analysis specifically to the determination of lost profits damages awards in patent infringement cases, and has questioned the method most commonly used by United States courts for calculating such awards, which is based on pre-tax lost profits and pre-tax interest, rather than after-tax profits and after-tax interest.² Jarosz points out that to reach the correct result and avoid a windfall to either the plaintiff or the defendant, the proper method should be to deduct the incremental income taxes that would have been paid on the patentee's

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¹ John C. Jarosz, *Considering Taxes in the Computation of Lost Business Profits*, 25 CREIGHTON L. REV. 41 (1991) (hereinafter "Jarosz I").

² John C. Jarosz, Pre-tax Versus After-Tax Patent Damages: Do The Courts Have It Right?, 74 J. PAT. & TRADEMARK OFF. Soc'Y (1992) (hereinafter "Jarosz II"). incremental profit and prejudgment interest as they would have been earned (i.e., tax the profit before it is invested and tax the interest after it is received and before it is reinvested). Jarosz also notes that since only cash can be invested to earn interest, damages awards involving prejudgment interest should be based on after-tax cash flows rather than income.³ A damages award which fully compensates the plaintiff after allowance for income taxes at current rates is determined by "grossing up" at the income tax rate in effect at the time of the judgment.⁴

The purpose of this paper is to illustrate and emphasize the importance of the points made by Jarosz, in particular the importance in patent infringement cases of calculating lost profits damages awards based on the incremental after-tax cash flows the patentee would have had in the "but-for" world, rather than his pre-tax incremental income. This is done by setting forth three different methods for calculating a patent damages award based on lost profits in which prejudgment interest is awarded. All three of the methods of calculation are based on the same assumed set of hypothetical facts.

II. The Assumed Facts

The infringement period was ten years and the judgment by the District Court was entered at the end of the twelfth year. Prejudgment interest is to be calculated on a compound interest basis.

The market in which the infringement occurred was growing vigorously and the patentee's lost sales amounted to 1,000 units in the first year of the infringement and increased by 400 units in each succeeding year until reaching 3,000 units in the sixth year, and thereafter remained at 3,000 units per year for the remainder of the infringement period.

The patentee did not have sufficient manufacturing capacity at the commencement of the infringement to manufacture additional product, but, in the "but-for" world, would have anticipated the need for additional manufacturing capacity to support additional sales, and would have made the required capital investments in time to have the additional manufacturing capacity available when needed.

³ See Jarosz I at 43, 46, 48, 58, and 59, and Jarosz II. See also Wagner, How Do You Measure Damages? Lost Income Or Lost Cash Flow?, J. ACCOUNTANCY, Feb. 1990, at p. 29, and Fisher and Romaine, Janis Joplin's Yearbook And The Theory Of Damages, J. ACCOUNTING, AUDITING & FINANCE, Vol. 5, No. 1 (Winter-1990) at p. 145.

⁴ "Grossing up" is done by dividing the after-tax income and interest by one minus the income tax rate in effect at the time of the judgment. See Jarosz I at 53 and Jarosz II.

Capacity additions came on line in the year following the capital investment for the addition. Thus the patentee would have incurred the capital expenditure for each increment of additional manufacturing capacity in the year prior to placing the additional capacity in service.

The minimum increment of manufacturing capacity addition was for 1,000 units, and the required investment was \$1,000 for each such addition. Capital investments were depreciated (straight line depreciation) over a five year period, commencing in the year the addition was placed in service.⁵

The sales price for the additional product would have been \$1.00 per unit. The incremental manufacturing cost (not including depreciation) would have been \$0.50 per unit and the incremental marketing and administrative costs would have been \$0.25 per unit. These "but-for" costs are assumed to be unchanged throughout the infringement period. All other costs in the "but-for" world are assumed to be fixed.

The pre-tax interest rate was 6% and the marginal income tax rate was 35%. These are also assumed to be unchanged over the entire period.

The assumptions are summarized in Table 1. The year-by-year depreciation for the required capital investments is also calculated in Table 1. See footnote 5.

III. Calculation Of Lost Profits Damages Awards: Three Methods

Table 2 illustrates the method most often followed by courts in the United States in patent infringement cases for ascertaining lost profits damages awards which include prejudgment interest. For that reason it has been dubbed the "Standard" method. It differs from the other two methods to be presented in this paper in that, inter alia, it does not take into account the incremental income taxes that would have been paid by the patentee on its incremental lost profits income and interest income as they were earned in the "but-for" world.

In the "Standard" calculation, "Interest Income/(Expense)" for any year is determined by multiplying the interest rate for that year (assumed to be 6%) by the "Cumulative ("Invested") Income" for the prior year. "Cumulative ("Invested") Income" for any year is determined by adding

⁵ The calculations as presented assume "straight line" depreciation for income tax purposes. This simplifies the calculations. In the "real world" the patentee would likely use accelerated depreciation for income tax purposes. See Jarosz I at 47.

"Total Income" for that year to the "Cumulative ("Invested") Income" for the prior year. The "Standard" method, on the assumed facts, results in a "Damages Award" of \$3,748.

Table 3 illustrates a second method for calculating the damages award. This method has been called the "After-Tax Income" method because it recognizes that income taxes are a business expense as much as manufacturing or marketing expenses, and should be taken into account in calculating lost profits income and interest income.

In the "After-Tax Income" calculation, "Interest Income/(Expense) Before Tax" for any year is determined by multiplying the pre-tax interest rate for that year (assumed to be 6%) by the "Cumulative After-Tax ("Invested") Income" for the prior year. "Cumulative After-Tax ("Invested") Income" for any year is the sum of the "Net Income After Tax" for that year and the "Cumulative After-Tax ("Invested") Income" for the prior year.

The "After-Tax Income" method determines the patentee's "After-Tax Lost Income" (after-tax lost profits and interest), again on the assumed facts, to be \$2,255 and requires a damages award of \$3,469 to place the patentee in the same after-tax income position it would have enjoyed had the infringement not occurred. The "Damages Award" is determined by dividing the total "After-Tax Lost Income" (\$2,255) by one minus the tax rate.

Table 4 illustrates a third method for calculating the damages award. This method has been called the "After-Tax Cash Flow" method because, in addition to providing for the payment of income taxes on the patentee's incremental income, it also recognizes that "income" in accrual accounting is simply a concept, not necessarily money (cash) that can be invested, and that only cash can be invested to earn interest.⁶

In the "After-Tax Cash Flow" calculation (Table 4), the "Tax On Operating Profit" is the same as the income tax determined to be payable in the "After-Tax Income" calculation of Table 3. This is because income taxes are payable on the operating income (not the net operating cash flows), and the operating income (and income taxes payable thereon) do not change and are those reported in Table 3. The "Interest Income/ (Expense) Before Tax" does, however change from Table 3 to Table 4 because, in Table 4, it is calculated on the "Cumulative After-Tax ("Invested") Cash" of Table 4 rather than the "Cumulative After-Tax ("Invested") Income" of Table 3. Thus, in Table 4, "Interest Income/

⁶ Jarosz I at 46, Jarosz II.

(Expense) Before Tax" for any year is determined by multiplying the pretax interest rate for that year (assumed to be 6%) by the "Cumulative After-Tax (Invested) Cash" for the preceding year. The "Tax On Interest Income/(Expense)" for any year is determined by multiplying the "Interest Income/(Expense) Before Tax" for that year by the income tax rate for that year (assumed to be 35%). "Cumulative After-Tax (Invested) Cash" for any year is the sum of the "Net Cash Flow After Tax" for that year and the "Cumulative After-Tax (Invested) Cash" for the prior year.

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The "After-Tax Cash Flow" method takes into account the cash flows which would have been experienced by the patentee in the "but-for" world and determines the patentee's "After-Tax Cash Loss", on the assumed facts, to be \$1,771. A "Damages Award" of \$2,724 (\$1,771 divided by one minus the assumed tax rate) places the patentee in exactly the same after-tax cash position it would have enjoyed had the infringement not occurred.

IV. Evaluation Of The Three Approaches

The results of the three calculations are widely divergent. If, as I will argue in this paper (and Jarosz has argued in both of his papers), the "After-Tax Cash Flow" calculation (Table 4) is the correct methodology, then the method most commonly used by U.S. courts (the "Standard" method-Table 2), on the assumed facts, overcompensates the patentee by 38%.

For convenience, the results are summarized as follows:

Damages Award
\$3,748
\$3,469
\$2,724

In Aro v. Convertible Top,⁷ the United States Supreme Court established a clear standard for determining damages awards in patent infringement cases:

[O]nly "damages" may be recovered. These have been defined by this Court as "compensation for the pecuniary loss he [the patentee] has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts." They have been said to constitute "the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred." (Citations omitted)

⁷ 377 U.S. 476, 507 (1964) (hereinafter "Aro").

Subsequently, the Supreme Court, in *General Motors v. Devex*,⁸ in holding that prejudgment interest ordinarily should be awarded, stated:

An award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also the foregone use of the money between the time of infringement and the date of the judgment.

The award of prejudgment interest as contemplated by *Devex* immediately raises the questions of (1) the amount of money on which interest should be awarded, (2) the time from which interest should be calculated, (3) the type of interest (simple or compound), and (4) the interest rate.⁹ The latter two topics are beyond the scope of this paper, although all of the calculations assume that interest should be compounded and use a 6% interest rate, before taxes.

The "Standard" calculation (Table 2), i.e., that most commonly followed by U.S. courts, simply ignores income taxes, and thus calculates interest on more money than the patentee would have had. The failure by the courts to take income taxes into account would appear to be contrary to Judge Markey's admonition in *Panduit*¹⁰ that the patentee must prove "the amount of profit he would have made." The determination of profit necessarily includes not only proof of incremental revenues, but proof of incremental costs as well.¹¹ Taxes are a fact of business life and are every bit as much of a cost affecting profit as are manufacturing or marketing expenses. There is no justification in logic for treating taxes differently from any other business cost.

Stated justifications for ignoring taxes have been that the determination of appropriate tax rates would be speculative, that taking taxes into

⁸ 461 U.S. 648, 656 (1983) (hereinafter "Devex").

⁹ The question of the appropriate interest rate has been discussed extensively. See, *i.e.*, Patell, Weil and Wolfson, Accumulating Damages In Litigation: The Roles Of Uncertainty and Interest Rates, J. of LEGAL STUDIES, Vol. XI (June 1982) at p. 341; Blackstone and Bowman, The Size of Damages-Time Of Injury And The Role Of Interest, COMMERCIAL DAMAGES REPORTER, Vol. 5, Issue 1 (Jan.-Feb. 1990) at p. 3; Lanzillotti and Esquibel, Measuring Damages In Commercial Litigation: Present Value Of Lost Opportunities, J. ACCOUNTING, AUDITING & FINANCE, Vol. 5, No. 1 (Winter-1990) at p. 125; and Fisher and Romaine, Janis Joplin's Yearbook And The Theory Of Damages, J. ACCOUNTING, AUDITING & FINANCE, Vol. 5, No. 1 (Winter-1990) at p. 145.

¹⁰ Panduit v. Stahlin, 575 F.2d 1152, 1156 (6th Cir. 1978).

¹¹ See Panduit at 1157, concluding that findings by the master and District Court that Panduit failed to prove certain of its costs were not clearly erroneous and affirming their determination that Panduit had therefore not proved its lost profits.

account would result in double taxation of the award to the patentee, and that the "collateral source" rule precludes consideration of taxes.¹²

The former justification is specious. The correct income tax rate to use is the patentee's "marginal tax rate," i.e., the rate the patentee would have paid on its additional income. Almost all businesses use the Federal Income Tax Rate (or the Federal Rate plus an allowance for state income taxes) as the "marginal tax rate" in their business planning.¹³ Furthermore, in most "real world" situations, the damages period is wholly in the past and the only relevant tax rates are past (and current) tax rates.¹⁴ Tax rates for the appropriate years are known (they are a matter of public record), and the patentee's actual effective tax rates for those years are also normally known.¹⁵ Furthermore, under Panduit, it is the plaintiff who has the burden of proving his lost profits, which necessarily includes proof of expenses as well as revenues. Proof of the patentee's year-by-year marginal tax rates should be considerably easier than proof of many of the other elements of a lost profits calculation. The "double taxation" objection is easily solved by "grossing up" the after-tax damages to obtain an award that takes into account taxes at the tax rate in effect on the date of the judgment.¹⁶ The calculation is simple; divide the after-tax damages by one minus the tax rate in effect at the time of the judgment.

The "After-Tax Income" calculation (Table 3) deals with the some of the foregoing objections and takes into account the additional income taxes the patentee would have paid on its additional income. The result is obvious. The award to the patentee is \$3,469 rather than \$3,748.

¹² See Jarosz I at 60-63. This paper deals only with the first two justifications. See Jarosz I at p. 63 for a discussion of the collateral source rule.

¹³ See Jarosz I at 68 for a discussion of alternative rates for those situations in which the statutory rate may not be appropriate.

¹⁴ This paper does not include a discussion of the case where the damages period extends into the future, beyond the date of the judgment. Forecasting future tax rates is routinely done in business analyses and should be no more difficult (and perhaps considerably less so) than forecasting sales revenues or future manufacturing or marketing expenses.

¹⁵Calculations by the author (not reported here) suggest that over relatively long time periods there is very little difference in result if the patentee's year-by-year actual tax rates as determined from its annual reports are used instead of the "marginal tax rate."

¹⁶ In *Kalman v. Berlyn*, 914 F.2d 1473, 1483 (Fed. Cir. 1990), the Court of Appeals for the Federal Circuit overruled a district court opinion allowing the deduction of taxes and stated that:

By taking into account the additional income taxes the patentee would have paid on the additional income the patentee would have had if the infringement had not occurred this calculation more closely follows the mandate of the Supreme Court in *Devex* to compensate the patentee for "the foregone use of the money between the time of infringement and the date of the judgment." The only money, the use of which the patentee has foregone, is that which he would have had after paying its taxes.

Similarly, this result is more nearly consistent with command of *Aro* to award the patentee "the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred." If the infringement had not occurred, and the patentee had made the additional income calculated from the assumed facts, he would have paid the additional income taxes, and his "pecuniary condition if the infringement had not occurred" would have reflected (and been reduced by) those income tax payments.

The "After-Tax Income" calculation (Table 3), however, does not take into account the fact that "income" is only a concept, not necessarily money (cash) that can be invested to earn interest, that only cash can be invested to earn interest, and that the damages award will be paid in cash.¹⁷

In the "After-Tax Income" calculation (Table 3), the cost of the capital equipment to manufacture the product is taken as "depreciation" over the useful life of the equipment, even though the equipment necessarily had to be installed and paid for before it could be used to manufacture the product. Similarly, under standard accounting practice, "income" is often "recognized" at the time the product is delivered to the customer, even though payment in cash will not be received until sometime in the future,

[I]t is impossible to determine precisely what taxes will be paid, because the other income and deductions the plaintiff will have in the *year of receipt* of the award will affect the amount of taxes to be paid.

Id. at 1483 (citing R. DUNN, RECOVERY OF DAMAGES FOR LOST PROFITS § 6.8 (1987) (emphasis added).

This statement may well be correct, but it is beside the point if the reasoning of the Supreme Court regarding prejudgment interest is also applied to taxes. *See Devex*, at 655 (the Supreme Court stated that the purpose of prejudgment interest is to compensate the patentee for "the foregone use of the money between the time of the infringement and *the date of the judgment*") (emphasis added). Obviously the tax rate on the date of the judgment should be known.

¹⁷ See Jarosz I at footnote 24.

and the cash expenditures to manufacture and sell the product were incurred in the past. $^{18}\,$

Since only cash can be invested to earn interest and since the damages payment will be made in cash, a truly accurate damages calculation in the spirit of Aro to place the patentee in what its "pecuniary...condition would have been if the infringement had not occurred" and of Devex to compensate the patentee for "the foregone use of the money between the time of infringement and the date of the judgment" should place the patentee in the after-tax cash position it would have enjoyed had the infringement not occurred. Hence the calculation must deal with "cash flows", not "income." Such a calculation must take into account the amount and timing of cash outflows necessary for capital investments, rather than depreciation which, like income, is a concept of accrual accounting for matching revenues and expenses in time. Such a calculation also must take into account the income taxes the patentee would have paid on its additional income, since taxes are also a cash outflow, just like other cash expenditures. (Yes, income is only a concept; but our government is not above collecting taxes on a concept.)

The "After-Tax Cash Flow" method (Table 4) takes these factors into account. This calculation reflects the patentee's after-tax cash position in the "but-for" world, given the assumed facts. It includes the cash revenues the patentee would have received for sale of the additional goods it would have sold in the "but-for" world; it includes the cash expenses the patentee would have incurred to manufacture and market the additional goods,¹⁹ including the taxes that would have been paid on the additional income; it includes the interest that would have been earned on the accumulated cash; and it includes the cash outflows that would have been required for the additional investments. The patentee, had it captured all of the sales, and incurred all of the expenses necessary to do so, and earned (and paid) interest at the assumed rate, would have had an additional \$1,771 after-tax cash at the time of judgment. The damages award, "grossed up" to allow for current taxes, would be \$2,724 and would provide the patentee

¹⁸ The function of accrual accounting is to determine "income" (a concept) by matching revenues and expenses in time, even though the cash revenues may not be received until some future time and the cash expenses may have been incurred in the past.

¹⁹ The "After-Tax Cash Flow" calculation in Table 4 assumes that Incremental Sales Revenues were received in the same year the related Manufacturing Costs and Marketing & Administrative Costs were incurred.

with exactly \$1,771 after-tax cash after allowing for income taxes at the assumed rate.

A damages award of this amount meets the mandates of *Aro* to award the patentee "the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred" and of *Devex* to compensate the patentee for "the foregone use of the money between the time of infringement and the date of the judgment."

V. Conclusion

The "After-Tax Cash Flow" method (Table 4) for calculating a lost profits damages award including prejudgment interest is the only method among the three presented that properly compensates the patentee in accordance with the requirement of *Aro* that the patentee be placed in "what his [pecuniary] condition would have been if the infringement had not occurred." Both of the other methods, on the assumed facts, confer a windfall on the patentee.

The "After-Tax Cash Flow" method does so because it correctly answers the first two questions that follow from *Devex*, namely (1) the amount of money on which interest should be awarded and (2) the time from which interest should be calculated. The amount of money is the cash which the patentee would have had available to invest to earn interest (i.e., after-tax cash), and the time is the time from which that cash would have been available for investment.

The calculations are no more difficult than the other two methods. The "marginal tax rates" are readily accessible and are not speculative. The possibility of double taxation is avoided by "grossing up" at current tax rates. The "After-Tax Cash Flow" method affords Courts (and litigants) the means for determining patent damages awards which satisfy the objectives of the law as set forth by the Supreme Court in *Aro* and *Devex*.

Year	0	. 1	2	3	4	5	6	7	8	9	10	Total
Incremental Units Sold		1,000	1,400	1,800	2,200	2,600	3,000	3,000	3,000	3,000	3,000	24,000
Unit Sales Price		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Incremental Sales Revenue		\$1,000	\$1,400	\$1,800	\$2,200	\$2,600	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$24,000
Incremental Capital Investment	\$1,000	\$1,000		\$1,000								\$3,000
Annual Incremental Depreciation ("straight Line")												
Year "0" Investment		\$200	\$200	\$200	\$200	\$200						
Year "1" Investment			\$200	\$200	\$200	\$200	\$200					\$1,000
Year "3" Investment					\$200	\$200	\$200	\$200	\$200			\$1,000
Total Annual Incremental Depreciation		\$200	\$400	\$400	\$600	\$600	\$400	\$200	\$200			\$3,000
Incremental Manufacturing Costs @ \$0.50 Per Unit		\$500	\$700	\$9 00	\$1,100	\$1,300	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$12,000
Incremental Marketing & Administrative Costs @ \$0.25 Per Unit		\$250	\$350	\$450	\$550	\$650	\$750	\$750	\$750	\$750	\$750	\$6,000
Assumed Marginal Tax Rate =	35%											
Assumed Interest Rate =	6%								-			

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INCOME, CASH, AND LOST PROFITS DAMAGES AWARDS

Year	0	11	2	3	4	5	6	7	8	9	10	11	12	Total
Incremental Sales Revenue		\$1,000	\$1,400	\$1,800	\$2,200	\$2,600	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000			\$24,000
Incremental Operating Costs														
Manufacturing Costs		\$500	\$700	\$900	\$1,100	\$1,300	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500			\$12,000
Depreciation		\$200	\$400	\$400	\$600	\$600	\$400	\$200	\$200					\$3,000
Marketing & Administrative Costs		\$250	\$350	\$450	\$550	\$650	\$750	\$750	\$750	\$750	\$750			\$6,000
Total Incremental Operating Costs		\$950	\$1,450	\$1,750	\$2,250	\$2,550	\$2,650	\$2,450	\$2,450	\$2,250	\$2,250			\$21,000
Incremental Operating Profit		\$50	(\$50)	\$50	(\$50)	\$50	\$350	\$550	\$550	\$750	\$750			\$3,000
Interest Income/(Expense)		\$0	\$3	\$0	\$3	\$0	\$3	\$25	\$59	\$96	\$146	\$200	\$212	\$748
Total Income (Operating Profit + Interest)		\$50	(\$47)	\$50	(\$47)	\$50	\$353	\$575	\$609	\$846	\$896	\$200	\$212	\$3,748
Cumulative ("Invested") Income		\$50	\$3	\$53	\$6	\$57	\$410	\$985	\$1,594	\$2,439	\$3,336	\$3,536	\$3,748	
Damages Award =	\$3,748													

Note: Some Numbers May Not Add Due To Rounding.

Year	0 1	2	3	4	5	6	7	8	9	10	11	12	Tota
Incremental Sales Revenue	\$1,000	\$1,400	\$1,800	\$2,200	\$2,600	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000			\$24,000
Incremental Operating Costs													
Manufacturing Costs	\$500	\$700	\$900	\$1,100	\$1,300	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500			\$12,000
Depreciation	\$200	\$400	\$400	\$600	\$600	\$400	\$200	\$200					\$3,000
Marketing & Administrative Costs	\$250	\$350	\$450	\$550	\$650	\$750	\$750	\$750	\$750	\$750			\$6,000
Total Incremental Operating Costs	\$950	\$1,450	\$1,750	\$2,250	\$2,550	\$2,650	\$2,450	\$2,450	\$2,250	\$2,250			\$21,000
Incremental Operating Profit	\$50	(\$50)	\$50	(\$50)	\$50	\$350	\$550	\$550	\$750	\$750			\$3,000
Interest Income/(Expense) Before Tax	\$0	\$2	\$0	\$2	\$0	\$2	\$16	\$38	\$61	\$92	\$125	\$130	\$469
Total Income Before Tax (Operating + Interest)	\$50	(\$48)	\$50	(\$48)	\$50	\$352	\$566	\$588	\$811	\$842	\$125	\$130	\$3,469
Income Taxes													
Tax On Operating Profit	\$18	(\$18)	\$18	(\$18)	\$18	\$123	\$193	\$193	\$263	\$263			\$1,050
Tax On Interest Income/(Expense)	\$0	\$1	\$0	\$1	\$0	\$1	\$6	\$13	\$21	\$32	\$44	\$46	\$164
Total Income Taxes	\$18	(\$17)	\$18	(\$17)	\$18	\$123	\$198	\$206	\$284	\$295	\$44	\$46	\$1,214
Net Income After Tax	\$33	(\$31)	\$33	(\$31)	\$33	\$229	\$368	\$382	\$527	\$548	\$81	\$85	\$2,255
Cumulative After-tax ("Invested") Income	\$33	\$1	\$34	\$3	\$35	\$264	\$632	\$1,014	\$1,541	\$2,089	\$2,170	\$2,255	
Damages Award = \$3,469	After-ta	ax Lost In	come = S	\$2,255									

Note: Some Numbers May Not Add Due To Rounding.

Year	0	1	2	3	4	5	6	7		9	10	11	12	Total
Operating Cash Inflows = Incremental Sales Revenue		\$1,000	\$1,400	\$1,800	\$2,200	\$2,600	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000			\$24,000
Operating Cash Outflows														
Capital Investment	\$1,000	\$1,000		\$1,000										\$3,000
Manufacturing Costs		\$500	\$700	\$900	\$1,100	\$1,300	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500			\$12,000
Marketing & Administrative Costs		\$250	\$350	\$450	\$550	\$650	\$750	\$750	\$750	\$750	\$750			\$6,000
Total Operating Cash Outflows	\$1,000	\$1,750	\$1,050	\$2,350	\$1,650	\$1,950	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250			\$21,000
Net Operating Cash Flows	(\$1,000)	(\$750)	\$350	(\$550)	\$550	\$650	\$750	\$750	\$750	\$750	\$750			\$3,000
Interest Income/(Expense) Before Tax		(\$60)	(\$108)	(\$91)	(\$128)	(\$99)	(\$65)	(\$30)	\$2	\$36	\$67	\$98	\$102	(\$276)
Net Cash Flow Before Tax	(\$1,000)	(\$810)	\$242	(\$641)	\$422	\$551	\$685	\$720	\$752	\$786	\$817	\$98	\$102	\$2,724
Inœme Taxes														
Tax On Operating Profit		\$18	(\$18)	\$18	(\$18)	\$18	\$123	\$193	\$193	\$263	\$263			\$1,050
Tax On Interest Income/(Expense)		(\$21)	(\$38)	(\$32)	(\$45)	(\$35)	(\$23)	(\$10)	\$1	\$13	\$23	\$34	\$36	(\$96)
Total Income Taxes		(\$4)	(\$55)	(\$14)	(\$62)	(\$17)	\$100	\$182	\$193	\$275	\$286	\$34	\$36	\$954
Net Cash Flow After Tax	(\$1,000)	(\$807)	\$297	(\$626)	\$484	\$568	\$585	\$538	\$559	\$511	\$531	\$64	\$66	\$1,771
Cumulative After-tax ("Invested") Cash	(\$1,000)	(\$1,807)	(\$1,509)	(\$2,136)	(\$1,652)	(\$1,084)	(\$498)	\$40	\$599	\$1,110	\$1,640	\$1,704	\$1,771	
Damages Award =	\$2,724	Aft	er-tax Cas	sh Loss =	\$1,771									

Note: Some Numbers May Not Add Due To Rounding.

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