BUS 225H – Taxation of Property Transactions

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Week 5 Reading –

- **Intangibles**
    - §197 intangibles
    - Domain names
    - Intangibles - taxes other than on income
    - Carbon offsets and emission allowances

In addition to the items in this file, also read:

- IRC and Regulation Provisions Dealing with Intangible Assets [for reference]

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Question 1 – Where the gambling chips in the *Zarin* case (Reading 4) property?

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Basics of Acquiring Intangibles/Technology

An amortizable §197 intangible is an asset that ...
[alse see IRC §197 and the final regulations (T.D. 8865 (1/25/00)]

1) is held by the taxpayer in connection with the conduct of a trade or business or in an activity engaged in for the production of income (§212);

2) fits one of the following categories:

   a) goodwill or going concern value, b) workforce, c) information base,

   d) patent, copyright, formula, process, design, pattern, know-how, format, or similar items,

   e) customer-based intangible, f) supplier -based intangible,

   g) license, permit or other right granted by the government,

   h) covenant not to compete or similar arrangement, or i) franchise, trademark or trade name;

3) was not created by the taxpayer, unless,
   a) the asset is a license, permit or other right granted by the government,
   b) the asset is a covenant not to compete or similar arrangement,
   c) the asset is a franchise, trademark, or trade name, or
   d) the asset was created in connection with a transaction (or series of related transactions) that involves the acquisition of a trade or business or a substantial portion thereof;

4) is not a "separately acquired":
   a) interest in a film, sound recording, video tape, book, or similar property,
   b) contract or government right to receive tangible property or services,
   c) interest in a patent or copyright,
   d) contract or government right of a fixed duration less than 15 years or of a fixed amount (see Prop. Reg. §1.197-2(c)(13) and §1.167(a)-14(c)(2)),
   e) computer software program, or
   f) mortgage servicing right
      (unless regulations provide that the intangible constitutes a business by itself);

5) is not one of the following:
   a) an interest in a corporation, partnership, trust, or estate,
   b) an interest under an existing futures contract, foreign currency contract, notional principal contract, or other similar financial contract,
   c) any interest in land,
   d) "off-the-shelf" computer software,
   e) an interest under an existing lease or sublease of tangible property,
   f) an interest under existing indebtedness,
   g) a sports franchise, or
   h) certain transaction costs related to corporate organizations and reorganizations; and

6) is acquired after August 10, 1993, but not in an anti-churning transaction, or was acquired after July 25, 1991 and the taxpayer properly elected to apply §197.

<u>Section 197</u>, *Amortization of goodwill and certain other intangibles*,[1] was added to the federal income tax law in 1993 as a simplification provision and to allow acquired goodwill to be amortized. Part of the simplification was to provide a required depreciable life and method for acquired intangibles. Section 197 requires most acquired intangibles to be amortized over 15 years using the straight-line method (ratable).

Generally, an amortizable Section 197 intangible is an intangible asset acquired by a taxpayer. A few specific self-created intangibles, however, such as a trademark, are also treated as amortizable Section 197 intangibles. Certain intangible assets are excluded from the definition of amortizable Section 197 intangibles. Excluded intangibles with a determinable useful life greater than one year are depreciable under the general depreciation rules of Section 167 and the regulations thereunder. The excluded assets most significant to technology companies are "off-the-shelf" software, and separately acquired interests in patents. The depreciable life of an intangible asset excluded from the Section 197 intangible provision is determined under Section 167 and Reg. Sections 1.167(a)-3 and 1.167(a)-14.

Loss disallowance: To better ensure simplification and reduced tension between the IRS and taxpayers, Section 197(f) provides a special loss disallowance rule. Under this rule, if a taxpayer disposes of a Section 197 intangible at a loss, but still owns other Section 197 intangibles acquired in the same transaction, the loss is not allowed (although a gain would be reportable). The amount of the disallowed loss is added to the adjusted bases of the retained intangibles; thus, the loss is not permanently disallowed, only postponed. This rule serves to discourage a taxpayer from allocating a higher portion of the purchase price of a business to any Section 197 intangible it may plan to dispose of within 15 years of its acquisition.

Software: Acquired “off the shelf” software, even if purchased along with other assets which together constitute a trade or business, is amortized ratably over 36 months. Section 197(e)(3) defines “off-the-shelf” software as that which is “readily available for purchase by the general public, is subject to a nonexclusive license, and has not been substantially modified.” For example, the acquisition of a standard spreadsheet software program for recording laboratory results would be capitalized and amortized ratably over 36 months.

Software not meeting the definition of “off-the-shelf” software, may only be amortized over 36 months (rather than 15 years) if it is not acquired along with other assets constituting a trade or business or substantial portion of a trade or business. If software is acquired bundled with hardware, it is depreciated as part of the hardware (Reg. Section 1.167(a)-14(b) and Revenue Procedure 2000-50, 2000-2 C.B. 601). A computer is typically depreciated over 5 years using the double-declining balance method (Section 168).

Special depreciation rules, such as bonus deprecation (Section 168(k)) and expensing elections (Section 179) sometimes apply to software. These provisions tend to be temporary; they are usually enacted to stimulate the economy.

Patents: A separately acquired patent is not a Section 197 intangible. Such a patent may be amortized using one of the following methods as appropriate (Reg. Section 1.167(a)-14(c)(4)):

- Straight-line over its useful life (such as its statutory life).
- The income forecast method (section 167(g)) which bases annual depreciation as a percentage of the income generated from the patent during the year to the total expected revenue from the patent.
- Annual payment method where if the purchase price of the patent is payable at least annually as a fixed amount per use or a fixed percentage of revenue generated from use of the patent, the amount paid can be treated as the depreciation deduction for that year.

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[1] From *The Handbook of Technology Management* (forthcoming), chapter on Tax Considerations by Nellen.

Generally, a separately acquired right to use a patent (such as a license agreement) does not have to be capitalized. Instead, the payments for use of the patent are deductible as paid or incurred (Sections 162 and 197 and Reg. Section 1.197-2(f)(3)(iii)). The principles of Section 1235, *Sale or exchange of patents* (discussed later under dispositions), must be applied to determine if the taxpayer acquired the patent or merely has the right to use the patent. In making that determination, Section 1235 looks to whether all substantial rights to a patent were transferred.

In-process R&D: In-process R&D (IPRD) acquired by the taxpayer should be treated as a Section 197 intangible (Section 197(d)(1) and IRS Field Service Advice 200207006). Acquired IPR&D is not the type of R&D to which the expensing rule of Section 174 applies because it is not R&D performed by the taxpayer, but is instead an acquired asset.

Question 2 – Intel purchased two patents from a company going out of business. How should Intel treat the patents?

Domain name:[2] The language of §197 appears to not be broad enough such that there are some intangibles that do not fit neatly or obviously within any of the listed categories. One example, is a type of intangible that was created after 1993 and thus, was not something Congress could have even considered in crafting §197. This particular "uncertain" intangible is a domain name or URL (Uniform Resource Locator).

Typically, a business or individual obtains a domain name by registering with a registrar[3] and paying a nominal fee (perhaps $6 to $8). Other times, a business may acquire a domain name that has already been registered by someone else.[4] Some of these purchases have been quite newsworthy due to the dollar amount involved. For example, in 2000, "loans.com" sold at auction for a reported $3 million and in 2006, "diamonds.com" sold for $7.5 million.[5] Significant amounts may also be allocated to a domain name when a taxpayer acquires another business in a taxable acquisition.

Is an acquired domain name a §197 intangible? If not, then the §167 regulations should be reviewed to determine if the asset is amortizable. Under Regulation §1.167(a)-3(b), a safe harbor rule provides that where there is no statutory life, no possibility of estimating the life with reasonable accuracy, no prohibition on amortization, and it is not an intangible described in Regs. §1.263(a)-4(c) acquired from another person, the intangible asset will have a 15-year life. Regs. §1.263(a)-4(c) lists a variety of intangibles including some specifically covered under §197 and others specifically excluded from §197.

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[2] Nellen, Amortization Simplicity Not Obvious for Acquired Domain Names, BNA.
[3] A list of registrars can be found at http://www.icann.org/registrars/accredited-list.html.
[4] Domain names are also traded on the Internet, such as on E-Bay.
[5] Rapaport News, 5/11/06; http://www.diamonds.net/news/NewsItem.aspx?ArticleID=14883. Also see Zetetic, All Time Top Domain Sales; http://www.zetetic.com/domain-name-sales.html.

There is broad language at the start of Regs. §1.263(a)-4(c) though that provides that the listed intangibles are just examples of intangibles acquired from another party rather than an exhaustive list. Thus it appears that any intangible acquired from another party cannot benefit from the 15-year safe harbor even if it is not a §197 intangible. Thus, if it is determined that a domain name falls outside of §197, it can only be amortized if it is to be used for a limited period and the length of that period can be estimated with reasonable accuracy. Given that a business would usually intend to use a domain name for an indeterminable period of time, it would be a more favorable tax result for a domain purchased from another party at a significant cost to be a §197 intangible with a 15 year life. Section 197 treatment seems to be a logical treatment given the simplification intent behind §197 and the fact that §197 applies to some intangibles that have indeterminable lives, such as acquired goodwill.

Possible categories of §197 intangibles which a purchased domain name used in a trade or business or held for investment might fall within seem to be:

1. Customer-based intangibles and “any similar item” per §197(d)(1)(C)(iv) and (vi).
2. Any license, permit, or other right granted by a governmental unit or an agency or instrumentality per §197(d)(1)(D).
3. Any trademark per §197(d)(1)(F).

Each of these possibilities is discussed next.

IRC §197(d)(2)(A) defines “customer-based intangible” as “composition of market, market share, and any other value resulting from future provision of goods or services pursuant to relationships (contractual or otherwise) in the ordinary course of business with customers.” Regs. §1.197-2(b)(6) further provides that a customer-based intangible includes “customer base, a circulation base, an undeveloped market or market growth, insurance in force, the existence of a qualification to supply goods or services to a particular customer, a mortgage servicing contract, an investment management contract or other relationship with customer involving the future provision of goods or services.” Arguably, if someone owns, for example, the URL “erasers.com,” there is value in it because they can establish a website with that URL and generate advertising revenues by selling space on that site to eraser companies wanting to list their URL and company information. If generation of advertising dollars is what causes the acquired domain name to have value, it seems to meet the definition of a §197 intangible, assuming the URL and the revenue generating possibilities can be viewed as a single asset. If the domain name does not have value from providing goods or services to customers, other possible §197 categories should be considered.

A license, permit, or other government-granted right can be a §197 intangible even if it has an indefinite term or can be renewed indefinitely. Reg. §1.197-2(b)(8) includes the following examples of assets that fall within this §197 category: liquor license, taxicab medallion, airport landing right, regulated airline route, and television broadcasting license. Oversight and management of space on the Internet is under the direction of a non-profit organization called ICANN (Internet Corporation for Assigned Names and Numbers). According to its website: ICANN “is an internationally organized, non-profit corporation that has responsibility for Internet Protocol (IP) address space allocation, protocol identifier assignment, generic (gTLD) and country code (ccTLD) Top-Level Domain name system management, and root server system management functions. These services were originally performed under U.S. Government contract by the Internet Assigned Numbers Authority (IANA) and other entities. ICANN now performs the IANA function. As a private-public partnership, ICANN is dedicated to preserving the operational stability of the Internet; to promoting competition; to achieving broad representation of global Internet communities; and to developing policy appropriate to its mission through bottom-up, consensus-based processes.”

Is ICANN a government agency? The U.S. Department of Commerce played a role in setting up ICANN. Does that make it a government agency? One commentator has stated that the Department of Commerce

is the source of ICANN's powers.[6] The answer is not clear since ICANN is a non-profit organization rather than a government agency even though it was established under government authority.

Reg. §1.197-2(b)(1) defines a trademark as including "any word, name, symbol, or device, or any combination thereof, adopted and used to identify goods or services and distinguish them from those provided by others. … A trademark or trade name includes any trademark or trade name arising under statute or applicable common law, and any similar right granted by contract." Is a domain name a "similar right granted by contract?" While domain names and trademarks appear to share some similarities, there are also some differences. Both domain names and trademarks serve to identify a business and may have distinctive characteristics. However, the purpose of a domain name is to represent a series of numbers to locate a website. Domain names are only unique in terms of identifying a website; they do not have any distinctive shape, color, font, etc. Also, unlike a trademark, a domain name can be issued as long as no one else has registered it;[7] there is no need to show that it will be used in commerce. Also, some words that can be registered as domain names, such as "loans.com," are unlikely to qualify as a trademark because they are common words.

A 2000 article suggested that a domain name derives its value from two key sources: 1) the name's association with a company or product (such as "Amazon.com"), and 2) inherent value that is not part of the trademark value, but the value from registration of the name (such as "drugs.com"). The author posited that the value associated with the company or product can be treated as a trademark under §197, but that the inherent value cannot be treated as such.[8] If the government agrees with this interpretation, might the inherent value be a customer-based intangible since the likely expectation for the asset (and what gives it value) is that it will generate revenue, such as from advertising?

Depending on the facts and circumstances of the domain name and its intended purpose (what causes it to have value such that purchase price is allocated to it), a domain name might be a §197 intangible. Given the intent of §197 to simplify asset identification, allocation of purchase price, and determination of an amortizable life, it seems that Congress would have wanted a domain name to be a §197 intangible. But, given the existing language that does not clearly encompass a domain name, taxpayers will need to make their case for such treatment. This is an area greatly in need of guidance from Congress or the IRS.

Question 3 – Is a purchased domain name a §197 intangible asset?

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[6] A. Michael Froomkin, "Wrong turn in cyberspace: using ICANN to route around the APA and the Constitution," 50 *Duke Law Journal*, 17, 71 (Oct 2000); available at http://www.law.duke.edu/shell/cite.pl?50+Duke+L.+J.+17. The call for establishment of a non-profit organization to manage the domain name system is explained in a policy paper of the Department of Commerce, docket number 980212036-8146-02; available at http://www.ntia.doc.gov/ntiahome/domainname/6_5_98dns.htm.

[7] The Anticybersquatting Consumer Protection Act (P.L. 106-113, 11/29/99) which amends the trademark statute (15 U.S.C. § 1125(d)) may deter individuals from registering domain names intended to be similar to trademarks.

[8] David Hardesty, "Taxation of Internet Domain Names – Can They Be Shoehorned into the 15-Year Amortization Rules?" *Journal of Taxation*, Dec. 2000.

§1031 Like-kind exchange of intangible assets:

TAM 200602034 involved the exchanges of various intangible assets: "including (1) patents; (2) trademarks (including design marks) and trade names; (3) designs and drawings; (4) software; and (5) trade secrets and know-how." Reg. §1.1031(a)-2(c)(1) provides that intangible assets qualify for like-kind exchange treatment if they are of like kind. Unlike for tangible personal property, no "like class" standard is provided. "Whether intangible personal property is of a like kind to other intangible personal property generally depends on (i) the nature or character of the rights involved (e.g., a patent or a copyright) and (ii) the nature or character of the underlying property to which the intangible personal property relates."

Two intangibles examples are provided in the regulations. In the first, a copyright on one novel is exchanged for the copyright on a different novel and found to be like kind. In the other example, a copyright on a novel is exchanged for the copyright on a song and found not to be like kind. Thus, "both the nature or character of the rights involved and the nature or character of the underlying property must be of like kind."

The IRS also reviewed some rulings involving tangible personal property and noted that higher scrutiny has been given to personal property than real property in determining what is like kind.

In determining whether exchanged patents were like kind, the IRS rejected the taxpayer's approach of grouping them based on patent law categories of "(1) Process, (2) Machine, (3) Manufacture, and (4) Composition of Matter" because there was no precedent for doing so. Instead, the IRS ruled that to be considered like kind "the underlying property [of the patent] must be either of the same General Asset Class or the same Product Class or otherwise of like kind."

With respect to the exchanged trademarks and trade names, the IRS found that they are so similar to goodwill that just like for goodwill, §1031 should not apply. For "unregistered" intangibles, such as software, trade secrets and know-how, the IRS determined that such items are "not of like kind unless the specific underlying properties to which the unregistered intangibles relate are within the same General Asset Class or the same Product Class."

T argued that the rule prohibiting exchange of U.S. property for foreign property did not apply to intangibles because being intangible, place of use did not matter. The IRS disagreed. "Since the agreement grants a license to be used in furtherance of the manufacture of the products at the facilities in furtherance of the marketing and sale of products, and since the facilities are located in Country J, we believe that the intangibles are being used predominantly in Country J. Taxpayer has not established that the intangibles in question are being used predominantly in the United States. Accordingly, for this particular exchange, the properties received are not like-kind to the property transferred."

Software

Asset Treatment under IRC: Rev. Proc. 2000-50 replaces Rev. Proc. 69-21. The older revenue procedure was updated due to the enactment of §197 and other needed clarifications.

Rev. Proc. 2000-50 [excerpt]

1. Purpose

This revenue procedure provides guidelines on the treatment of the costs of computer software.

2. Definition

For the purpose of this revenue procedure, "computer software" is any program or routine (that is, any sequence of machine-readable code) that is designed to cause a computer to perform a desired function or set of functions, and the documentation required to describe and maintain that program or routine. It includes all forms and media in which the software is contained, whether written, magnetic, or otherwise.

Computer programs of all classes, for example, operating systems, executive systems, monitors, compilers and translators, assembly routines, and utility programs as well as application programs, are included. Computer software also includes any incidental and ancillary rights that are necessary to effect the acquisition of the title to, the ownership of, or the right to use the computer software, and that are used only in connection with that specific computer software. Computer software does not include any data or information base described in section 1.197-2(b)(4) of the Income Tax Regulations (for example, data files, customer lists, or client files) unless the data base or item is in the public domain and is incidental to a computer program. Nor does it include any cost of procedures that are external to the computer's operation.

5. Costs of Developing Computer Software

.01. The costs of developing computer software (whether or not the particular software is patented or copyrighted) in many respects so closely resemble the kind of research and experimental expenditures that fall within the purview of section 174 as to warrant similar accounting treatment. Accordingly, the Service will not disturb a taxpayer's treatment of costs paid or incurred in developing software for any particular project, either for the taxpayer's own use or to be held by the taxpayer for sale or lease to others, where:

(1) All of the costs properly attributable to the development of software by the taxpayer are consistently treated as current expenses and deducted in full in accordance with rules similar to those applicable under section 174(a); or

(2) All of the costs properly attributable to the development of software by the taxpayer are consistently treated as capital expenditures that are recoverable through deductions for ratable amortization, in accordance with rules similar to those provided by section 174(b) and the regulations thereunder, over a period of 60 months from the date of completion of the development or, in accordance with rules provided in section 167(f)(1) and the regulations thereunder, over 36 months from the date the software is placed in service.

6. Costs of Acquired Computer Software

.01. With respect to costs of acquired computer software, the Service will not disturb the taxpayer's treatment of:

(1) Costs that are included, without being separately stated, in the cost of the hardware (computer) if the costs are consistently treated as a part of the cost of the hardware that is capitalized and depreciated; or

(2) Costs that are separately stated if the costs are consistently treated as capital expenditures for an intangible asset the cost of which is to be recovered by amortization deductions ratably over a period of 36 months beginning with the month the software is placed in service, in accordance with the rules under section 167(f)(1). See section 1.167(a)-14(b)(1).

7. Leased or Licensed Computer Software

Where a taxpayer leases or licenses computer software for use in the taxpayer's trade or business, the Service will not disturb a deduction properly allowable under the provisions of section 1.162-11 as rental. However, an amount described in section 1.162-11 is not currently deductible if, without regard to section 1.162-11, the amount is properly chargeable to capital account. See section 1.197- 2(a)(3).

Question 4 – B Corporation purchased all of the assets of D Corporation. In addition to real property and some inventory and equipment, the acquired assets included a patent, customer list and 3-year covenant not-to-compete. The equipment included 100 office computers with word processing software and two special computers with software that was specially developed for D. The parties appraised the assets at $3.5 million and B paid $4.1 million. (a) What §197 intangibles did B acquire?[9] (b) Must B separate the word processing software from the computers? (c) Two years after the acquisition, one of the patent expired – how should B treat that for tax purposes?

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[9] In a taxable asset acquisition, §1060 (Reg § 1.1060-1(c)(2)) and the §338 regulations require that purchase price be allocated to seven categories of assets starting with Class I. These classes are (per §1.338-6(b)):

- I) "cash and general deposit accounts (including savings and checking accounts) other than certificates of deposit held in banks, savings and loan associations, and other depository institutions"
- II) "actively traded personal property within the meaning of section 1092(d)(1) and §1.1092(d)-1 (determined without regard to section 1092(d)(3)). In addition, Class II assets include certificates of deposit and foreign currency even if they are not actively traded personal property."
- III) "assets that the taxpayer marks to market at least annually for Federal income tax purposes and debt instruments (including accounts receivable)" with some exceptions.
- IV) "stock in trade of the taxpayer or other property of a kind that would properly be included in the inventory of taxpayer if on hand at the close of the taxable year, or property held by the taxpayer primarily for sale to customers in the ordinary course of its trade or business."
- V) "all assets other than Class I, II, III, IV, VI, and VII assets"
- VI) "all section 197 intangibles, as defined in section 197, except goodwill and going concern value"
- VII) goodwill and going concern value (whether or not the goodwill or going concern value qualifies as a section 197 intangible)"

State Sales Tax & the Transfer of Intangibles

The acquisition of assets and services may be subject to sales tax in the state where the item or services are used. Sales tax rules vary from state to state in many ways including what is taxable (the tax base) and what exemptions they provide. States typically subject tangible personal property to sales tax and some services. However, many states have broadened their sales tax (either through legislation or interpretation) to include the intangible equivalent of tangible taxable items, such as downloaded software and music. Following is a sampling of various state rules or rulings to provide a sense of the types of sales tax issues raised when intangibles are present. To determine whether sales tax applies to a transfer, it is crucial to review the sales tax law of the relevant state(s).

Prototypes: Some items acquired by technology companies may be difficult to classify for sales tax purposes. For example, if a technology company hires a third party to engage in research to develop a prototype needed in further developing a product, the company gets the benefit of both services and the prototype, which is tangible personal property. Sales tax generally applies to tangible personal property. Thus, unless the state has a specific exemption for the prototype, it may be subject to sales tax. On the other hand, many states do not tax services. In considering the amount charged for the prototype, state law must be reviewed to determine if is entirely taxable as tangible personal property, or if the services obtained to design the prototype can be excluded.

In California, for example, guidance is provided on how the state's sales tax applies to R&D contracts where, in addition to the services of performing R&D, the customer obtains tangible personal property such as a report or a prototype. Sales tax does not apply if the property is provided incident to the services which must be the true object of the contract. The guidance uses terminology from the federal research tax credit to describe the services: "the service provided under the contract is undertaken for the purpose of discovering information which is technological in nature, the results of which are intended to be useful in the development of a new or improved product, process, technique, or invention." If additional prototypes are provided for other than information or testing use, they are subject to sales tax (California Regulation 1501.1).

Digital Photos: In some transactions, it is not clear whether the "true object" is the provision of non-taxable services or the provision of taxable property. For example, in Letter Ruling 5058 (8/08), the Missouri Director of Revenue held that copyrighted photos downloadable over the Internet were not subject to sales or use tax because they were intangible and did not constitute a taxable telecommunications service.

In *Smith v. Alabama Dep't of Revenue*, Ala. Dept. of Rev., Admin. Law Div., No. S. 05-1240 (11/17/06), the digital photos sold by Smith, a professional photographer, were subject to Alabama sales and use tax. Smith was hired for special events, such as weddings, and took photos with a digital camera. The photos were then posted to a website for the customer. Customers could also get the photos via email or a CD. If the customer requested prints, Smith provided them and concedes that sales tax is owed on those items. Smith argued that the flat fee for covering an event was not contingent on the customer actually purchasing tangible photos so should not be part of the charge for the photos. Smith also argued that even if the digital photos could be viewed as tangible personal property, they should still not be subject to sales tax as they were provided incident to the personal photography services.

The judge first found that the digital photos were tangible personal property, relying on a case in which electricity, "the flow of electrons," was found to be tangible property. Per the judge: "the internet and e-mail involve the transmission of electrical impulses, i.e., electricity, which, as indicated, constitutes tangible personal property. Consequently, the electronic transfer of digital photographic images from a seller to a purchaser for a price constitutes the sale of tangible personal property."

The judge next considered whether the photos were just incident to the nontaxable photography services. The judge referred to rules on the taxation of software to guide this decision. In Alabama, only custom software is not subject to sales tax, with canned software being subject to tax regardless of how it is transferred to customers. The judge noted that the rationale for the custom software not being subject to

sales tax is not that it is intangible, but because it represents a service with the software transferred incident to that service. “All software is tangible in that it involves an “arrangement of matter, physically recorded on some tangible medium,...” *Wal-Mart*, 643 So.2d at 291 , citing *South Central Bell*, 643 So.2d at 1246.”

In determining whether the photos are incident to a service, the judge referred to an advertising agency case (*State v. Harrison*, 386 So.2d 461 (1980)) and ones involving lawyers. “Photography has never been held to be a learned profession for purposes of applying the sales tax law. The Taxpayer certainly uses skill and creativity in his business, but that skill and creativity goes into making the tangible photograph, which is sold at retail and sales tax is due thereon. Unlike a lawyer’s brief or a will, or a prescription prepared by a physician, or the catalogs and brochures in Harrison, which are only means by which professional services are provided, the final product provided by the Taxpayer is the tangible photograph.”

The judge also found it irrelevant how the photos were transferred to customers. “The Taxpayer is selling photographs at retail, albeit in digitized form. But the form in which tangible property is delivered by the seller to the purchaser should be of no consequence. Just as the sale of canned software is taxable “regardless of whether it is transferred to the purchaser in physical form, via telephone lines, or by another alternative form of transmission,“ see, Reg. 810-6-1.37(3), the retail sale of photographs is taxable, whether delivered in final printed form or in digital form over the internet or by e-mail.”

The judge also found it irrelevant that after receiving the digital photo, the customer would still need to print it. The judge found this to be similar to a customer buying a chair that needs to be assembled – it is still subject to sales tax.

Digital Music: In 2007, at its request, Apple Computer received an advisory opinion from the New York State Department of Taxation and Finance on the sales tax treatment of:

- Electronically delivered codes that convey the right to download “specific audio files.”
- Codes delivered on tangible media that convey the right to download “specific audio files.”
- Sale of digital music downloaded from the Internet using a special code transferred to the customer on a plastic card.

Generally, the New York sales tax applies to the retail sales of tangible personal property. The tax agency ruled that sales tax was not owed on any of the transfers. It noted that customers in the first two transfers received the same digital music or file as in the situation where everything was done via the Internet. Thus, it ruled that the sales were of intangibles and were not subject to sales or use tax. TSB-A-07(14)S. 5/17/07; http://www.tax.state.ny.us/pdf/advisory_opinions/sales/a07_14s.pdf.

Effective 10/1/06, New Jersey’s sales tax rate will increased from 6% to 7% and the tax base was expanded to include more services and intangible/digital property. For example, a new category of taxable items includes “digital property” defined as “electronically delivered music, ringtones, movies, books, audio and video works and similar products, where the customer is granted a right or license to use, retain or make a copy of such item. Digital property does not include video programming services, including video on demand television services, and broadcasting services, including content to provide such services.” The base was also extended to prewritten software delivered electronically unless used directly and exclusively in the conduct of business.
(http://www.state.nj.us/treasury/taxation/digitalproperty.shtml)

Software: Issues have existed for decades on how to classify software for federal and state tax purposes. For example, is custom software really the provision of services or the sale of property? Is software tangible or intangible? Following is a sampling of rulings and law changes to provide a sense of the issue and its resolution – which can vary from state to state and court to court.

California: Reg. 1502(f)(1)(D) provides: "The sale or lease of a prewritten program is not a taxable transaction if the program is transferred by remote telecommunications from the seller's place of business, to or through the purchaser's computer, and the
purchaser does not obtain possession of any tangible personal property, such as storage media, in the transaction."

Massachusetts: In 2006, Massachusetts modified its definition of "tangible personal property" by adding: "A transfer of standardized computer software, including but not limited to electronic, telephonic, or similar transfer, shall also be considered a transfer of tangible personal property. The commissioner may, by regulation, provide rules for apportioning tax in those instances in which software is transferred for use in more than one state." Taxpayers who download or acquire in some other way, prewritten software for use in Massachusetts from an unregistered out-of-state retailer must self-assess the use tax. Transfers of custom software, generally continue to be treated as nontaxable personal services.

Louisiana: *South Central Bell Telephone Co. v. Barthelemy*, 643 So 2d 1240 (S Ct La, 1994) was one of the first state cases to consider whether software should be considered tangible or intangible. The court overturned the lower court decision and concluded that the software was tangible. Louisiana subsequently modified its tax law to make it clear that software was subject to sales tax.

The software involved was used in telephone switching and the taxpayer (T) received the software on magnetic tapes. T transferred the software from the tapes to its system processors. Another type of software T acquired was for data processing. This software was acquired via transfer over the phone lines. All of the software was subject to licensing agreements.

Louisiana sales tax law only applied to use of consumption of tangible personal property. The lower court found that the software was intellectual property rather than tangible personal property.

""Tangible personal property" is defined in § 56-18 of the City Code as follows:

> Personal property which may be seen, weighed, measured, felt or touched, or is in any other manner perceptible to the senses. The term "tangible personal property" shall not include stocks, bonds, notes or other obligations or securities."

The court noted that states varied on how they classified software. "The taxation of computer software has, however, been considered by numerous courts across the country. These courts have split on the issue and have employed various analyses in reaching their decisions. The first case generally recognized as addressing the tangibility of computer software for tax purposes was *District of Columbia v. Universal Computer Assoc., Inc.,* 465 F.2d 615 (D.C.Cir.1972), which held computer software to be intangible, and therefore not taxable. The cases following soon thereafter, likewise held computer software to be intangible for sales, use and property tax purposes. … "

"However, as computer software became more prevalent in society, and as courts' knowledge and understanding of computer software grew, later cases saw a shift in courts' attitudes towards the taxability of computer software, and courts began holding computer software to be tangible for sales, use and property tax purposes. This trend began with two cases decided just one day apart—*Comptroller of the Treasury v. Equitable Trust Co.,* 296 Md. 459 (1983) and *Chittenden Trust Co. v. King,* 143 Vt. 271 (1983). The trend continued throughout the 1980's, … "

The court noted that under the Uniform Commercial Code (UCC), software is usually treated as goods.[10]

The court then examined the "basic characteristics" of software to help in classifying it. "In its broadest scope, software encompasses all parts of the computer system other than the hardware, i.e., the machine; and the primary non-hardware component of a computer system is the program. … Thus, another definition of software is "a set of instructions" or "a body of information." …

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[10] In TAM 9231002, the IRS also concluded that off-the-shelf software should be treated as the sale of goods (inventory accounting), rather than the sale of services.

“When stored on magnetic tape, disc, or computer chip, this software, or set of instructions, is physically manifested in machine readable form by arranging electrons, by use of an electric current, to create either a magnetized or unmagnetized space. …The computer reads the pattern of magnetized and unmagnetized spaces with a read/write head as “on” and “off”, or to put it another way, “0” and “1”. This machine readable language or code is the physical manifestation of the information in binary form.”

“Ordinarily, at least three program copies exist in a software transaction: (i) an original, (ii) a duplicate, and (iii) the buyer’s final copy on a memory device. … More basically, “A program copy is developed at the seller’s computer. To deliver a copy to the buyer, the seller duplicates the program copy on software, and transports the duplicates to the buyer’s computer. The duplicate is read into the buyer’s computer and copied on a memory device.” …”

The court went on to say: “We agree with Bell and the court of appeal that the form of the *delivery* of the software—magnetic tape or electronic transfer via a modem—is of no relevance. However, we disagree with Bell and the court of appeal that the essence or real object of the transaction was intangible property. That the software can be transferred to various media, i.e., from tape to disk, or tape to hard drive, or even that it can be transferred over the telephone lines, does not take away from the fact that the software was ultimately recorded and stored in physical form upon a physical object. … As the court of appeal explained, and as Bell readily admits, the programs cannot be utilized by Bell until they have been recorded into the memory of the electronic telephone switch. … The essence of the transaction was not merely to obtain the intangible “knowledge” or “information”, but rather, was to obtain recorded knowledge stored in some sort of physical form that Bell’s computers could use. Recorded as such, the software is not merely an incorporeal idea to be comprehended, and would be of no use if it were. Rather, the software is given physical existence to make certain desired physical things happen.”

“One cannot escape the fact that software, recorded in physical form, becomes inextricably intertwined with, or part and parcel of the corporeal object upon which it is recorded, be that a disk, tape, hard drive, or other device. … That the information can be transferred and then physically recorded on another medium is of no moment, and does not make computer software any different than any other type of recorded information that can be transferred to another medium such as film, video tape, audio tape, or books.” …

“That the information, knowledge, story, or idea, physically manifested in recorded form, can be transferred from one medium to another does not affect the nature of that physical manifestation as corporeal, or tangible. … The software was reduced to physical form and recorded on a tangible object prior to delivery to Bell, and Bell maintained the software in physical form on a tangible object—the computer hard drive. If Bell chooses to so store and use the software in the City of New Orleans, it must pay the use tax imposed on such tangible personal property.” …

“When the magnetic tapes, upon which the switching software was physically recorded, came to rest in the City of New Orleans, or alternatively, when the software was physically recorded into the memory of the electronic telephone switch, the use tax attached. Likewise, once the data processing software was transmitted via telephone line and then physically recorded into the memory of Bell’s computer, the software came to rest in corporeal or tangible form in the City of New Orleans and the use tax attached.” …

“We reject Bell’s argument that what was purchased was the license or right to use the computer software, and that such license is intangible. … Adopting the reasoning from a New York case, we stated that “ ‘the transaction which is the subject of the tax under review consists of the transfer by the distributor to the exhibitor of the possession of corporeal property in the form of positive and negative prints of photoplays with the license to use or exhibit them for a specified time. The license to exhibit without the transfer of possession would be valueless.’ …Hence, we found that the license to exhibit the films was inseparable from the tangible film prints. Likewise, the license to use the software, without transferring the software, would be of no use to Bell, and the license to use the software is inseparable from the physical manifestation of the software in recorded form.” …

Texas: In Texas Comptroller's Decision No. 36,237)1998), the Comptroller found that a X, a Minnesota company with no employees or physical location in Texas was subject to sales tax collection obligations for software it licensed to customers in the state. The terms of the license included that X owned the software, which Texas law treats as tangible personal property. Per the ruling: "the transactions at issue involve the licensing of software programs (defined by statute and rule as the equivalent of leases or rentals of tangible personal property), not sales of tangible personal property …. Through the licensing of software programs, [X] maintained an ongoing interest in the tangible personal property that was shipped by common carrier to customers for use in Texas. (The facts show that [X] retained title to the programs, but granted the customer authority to use the programs in Texas in return for a specified sum of money.) The same is not true of the out-of-state vendors involved in *Quill* and *Bellas Hess*. Further, [X's] Texas connections were not occasional. Indeed, [X's] Texas presence, through the leasing/licensing of software programs, was not of an isolated nature as evidenced by[40 – 60 programs in the state and 20 – 30 customers]. As such, I am inclined not to sustain [X's] argument that it lacks "substantial nexus" with Texas. Key to that determination is an awareness that this agency, in view of the *Quill* holding, has taken the position that an out-of-state lessor of tangible personal property is responsible for collecting and reporting tax, even though its only Texas connection is the presence of the leased equipment in Texas, and the legislature's classification of computer programs as tangible personal property."

Question 5 – How should software be classified for sales tax purposes? Why?

Other State Taxes

Software and other intangible property* can also raise issues under other types of state taxes such as property taxes. State income/franchise tax law must also be reviewed to determine whether software and any other intangible property is included in the property factor for apportionment purposes. Following are summaries of two rulings on these issues.

Cardinal Health 301, Inc. v. County of Orange, Super. ___ Cal.Rptr.3d ___, WL 4405337 (9/08) – this case involved whether software is subject to property tax in California. CH produces software to help in tracking patient medicine. The software could not be purchased without the equipment. The software is part of the Med-Station and represents about 90% of the value of the equipment. The Board found that the software was taxable because it was bundled. The court reversed and remanded the case so that the value of the non-BIOS software could be determined.

Generally, software is subject to property tax if it is bundled with the computer. R&T §995 doesn't refer to bundling though, but provides that basic operational programs are subject to tax. Basic operational software is something other than application software, that is "fundamental and necessary to the functioning of a computer" (§995). The court next reviewed Rule 152 for guidance. The court noted that the basic purpose of this rule is to value application software that comes bundled with the computer so it won't be taxed. The court interpreted Rule 152(d) as meaning that ""basic operational software" *must* be bundled in order to be "basic operational software" under section 995, and if not, it's not taxable."

The court reviewed the history of the rules under §995, Rule 152 and the *Hahn* case (73 Cal.App.4th 985 (1995)) so the case provides a comprehensive review of the rules on the application of property tax to software in California.

Arizona Corporate Tax Ruling No. 01-2 (2001) provides: "Under ordinary circumstances, the property factor includes only software treated as tangible personal property on the federal income tax return. The value of the software shall be attributed to the numerators of the states in which the software is used on a reasonable basis."

* Federal income tax law treats software as intangible (§197 and §167(f)). Some states have avoided the classification issue by just legislating that software is subject to sales tax, whether or not on tangible media.

Carbon Offsets and Emission Allowances

Numerous jurisdictions are implementing or considering greenhouse gas emission allowance (or "cap-and-trade") programs. Tax issues arise from the allocation, transfer, sale or exchange of such allowances. There is not much guidance on the tax treatment of these rights or allowances. Following is a brief overview[11] including the text of two IRS rulings from 1992 when the EPA started an emission allowance program to address "acid rain."

Definitions

- *Greenhouse gases (GHG) and emissions* – Certain gases prevent heat from leaving the atmosphere. The heat slowly causes warming. The Kyoto Protocol (Annex A)[12] notes six greenhouse gases (list below). The percentage each represented of 2004 GHG emissions in the U.S. is shown in parentheses.[13]
  - Carbon dioxide (CO_2) – primarily from burning of fossil fuels (coal, oil and gas), wood and solid waste. A lot of this emission comes from industry, transportation and households. Some of these emissions are absorbed by soil, oceans and trees. (83%)
  - Methane (CH_4) – from the production of coal, natural gas and oil as well as from decomposition of organic waste in landfills and from livestock (9%)
  - Nitrous oxide (N_2O) – from farming and industrial activities (5%)
  - Hydrofluorocarbons (HFCs) – from various industrial activities (less than 2%)
  - Perfluorocarbons (PFCs) – from various industrial activities (less than 2%)
  - Sulphur hexafluoride (SF_6) – from various industrial activities (less than 2%)

  Carbon dioxide is the major GHG which is why it is the focus of climate change solutions. However, the *global warming potential* (GWP) of the other gases is higher.

- *"Cap and trade" or emission allowance system* – government sets a limit on GHG emissions for particular industries. Companies are issued certificates indicating how much they are allowed to emit, with amounts likely decreasing each year. A reporting mechanism is used where the company reports how much they emitted and submits certificates to cover it. If the company does not have enough certificates, typically a fine is imposed (and the certificates may still need to be submitted in the future). If a company needs to emit more than allowed, it will need to either find a way to reduce its emissions or purchase certificates from others. This system employs market forces to encourage companies to determine their best emissions reduction strategy.

- *Carbon offsets* – a system of offsetting emissions by investing in activities that will reduce GHG emissions. For example, a traveler might pay to have trees planted to offset the emissions associated with the purchase of a computer or an airplane flight. Renewable Energy Certificates or Credits (RECs) or "green tags" are an example of a carbon offset where the REC buyer is helping to produce energy from renewable sources. For example, the REC might be used to help build a power plant that uses solar energy. Some states, such as Texas and Oregon, have Renewable Portfolio Standards (RPS) that may involve utility companies trading RECs in order to meet state-imposed renewable energy usage.[14]

  The Environmental Defense Fund defines a carbon offset as a "tool" that verifies that your expenditure not only was invested in a project to reduce GHG emissions, but verifies that as well.

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11 Materials are from outline prepared for ABA Tax Section meeting 1/19/08 by A. Nellen - Tax Consequences of Carbon Emission Allowances: Much Ado About CO2.

[12] Kyoto Protocol; available at http://unfccc.int/resource/docs/convkp/kpeng.pdf.

[13] Data from Pew Center on Global Climate Change; http://www.pewclimate.org/global-warming-basics/facts_and_figures/us_emissions/usghgemgas.cfm.

[14] Pew Center on Global Climate Change; http://www.pewclimate.org/states.cfm?ID=20.

Per their website on carbon offsets, "Buying a carbon offset allows you or your company to claim a reduction of your carbon footprint."[15]

Carbon Emission Allowances/Cap-and-Trade – Will this happen?

1. The U.S. government created an allowance program for sulfur dioxide emissions in 1990 to address acid rain problems (see brief summary in Rev. Proc. 92-19 included in this reading). The certificates were issued to companies for free.

2. A voluntary carbon offset trading system has existed in the U.S. since 2003 – the Chicago Climate Exchange (http://www.chicagoclimateexchange.com/).

   a. Trading is voluntary, but per legally binding target commitments. A third party verifies emission levels.

   b. In 11/07, the U.S. House of Representatives purchased CCX Carbon Financial Instrument (CFI) contracts as part of its plan to be carbon neutral by the end of the 110th Congress. The projected cost was $95,000 and the contracts were for U.S. projects and were retired (http://speaker.gov/pdf/GTCI621sum2.pdf and http://www.chicagoclimatex.com/news/press/release_20071023_USHouseCCXAuction.pdf).

3. The European Union began a carbon emissions trading system in 2005 to help meet its reduction obligations under the Kyoto Protocol.

4. Companies exist that assist with trading and financing of emission allowances and carbon offsets. For example, Cantor CO2e (http://www.cantorco2e.com/) and First Capitol (http://firstcapitolrm.com/carbon.shtml). There is also at least one association helping to coordinate emission trading activities – the International Emissions Trading Association (www.ieta.org), created in 1999.

5. In June 2005, California Governor Schwarzenegger signed Executive Order S-3-05 calling for GHG emissions to be reduced to 2000 levels by 2010, to 1990 levels by 2020 and 80% below 1990 levels by 2050.[16] More binding targets were approved with enactment of AB 32, the California Global Warming Solutions Act of 2006, in September 2006 (Chapter 488). This legislation calls for "market-based compliance mechanisms" to reduce California's GHG emissions to 1990 levels by 2020.[17] In June 2007, California issued a final report – *Recommendations for Designing a Greenhouse Gas Emissions Cap-and-Trade System for California*; http://www.climatechange.ca.gov/policies/market_advisory.html.

6. There are several proposals for a CO2 cap-and-trade program in the 110th Congress, including S. 1168, S. 1177, S. 2191, and H.R. 3989. The House Budget Committee held a hearing on emission allowances on 12/5/07 (http://budget.house.gov/hearings/2007/11.1.07Hearing%20Summary.pdf). Hearings were held on S. 2191 in the Senate Environment and Public Works Committee on 12/8, 13 & 15/07 (http://epw.senate.gov/public/).

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[15] EDF, "What are Carbon Offsets?" http://www.edf.org/page.cfm?tagID=26448.
[16] http://gov.ca.gov/executive-order/1861/.
[17] http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.html.

Question 6 – Company A receives 5 carbon certificates from the government at no cost. A incurred $100x of legal and related fees to obtain the certificates. Does A have any income? What is A's basis in the certificates? May A depreciate or amortize the certificates?

Question 7 – Company B purchases 3 certificates on the market for $30,000. What type of asset is this? If B may amortize it, what is the life and method?

Question 8 – Company C has two CO_2 certificates it does not need. Certificate X was purchased for $14,000 on 12/1/X6 and expires on 1/1/X9. Certificate Y was received by the government for no charge on 4/1/X6 and expires on 1/1/X8. The market price for X is $13,000 and $9,000 for Y.

(i) What is the tax effect to C if it exchanges Y for a CO_2 certificate Company M has that expires on 1/1/1X (3 years later than Y). M's certificate is for 20% less emissions.

(ii) What is the tax effect to C if it sells X, realizing a $1,000 loss?

(iii) What is the tax effect to C if X expires unused?

(iv) What is the tax effect if C exchanges a CO_2 certificate for a sulfur certificate?

Question 9 – Individual E purchases 2 certificates on the market for $15,000 and donates them to the National Resources Defense Council. What is the tax benefit to E?

Question 10 – Company F occasionally buys and sells carbon offsets on an exchange operated by a consortium of six states. The exchange is located in State X where F has no operations. Are there any state tax implications of F's trading transactions?

Question 11 – Jerry purchased a $100 "gift card" from Carbonfund.org, a §501(c)(3) non-profit organization. The non-profit organization will use the funds to invest in a project that will reduce GHG emissions. May Jerry treat the $100 as a charitable contribution or is he precluded because he gets a personal benefit from the "donation" (he can say he has reduced his "carbon footprint")? Would your answer change if the card were purchased by a business?

Considerations in an Emission Allowance/Cap-and-Trade Program

4. *Policy and Economic Considerations*

"Approaches to Reducing Carbon Dioxide Emissions," testimony by Peter R. Orszag, (former) Director Congressional Budget Office, 11/1/07, provides some observations on a cap-and-trade system for carbon emissions (http://www.cbo.gov/ftpdocs/87xx/doc8769/11-01-CO2Emissions.pdf).

- Market-based approaches to reducing carbon emissions are likely to be more cost effective than a command-and-control approach.
    - The cost of meeting the sulfur dioxide emission targets through an allowance system set up in the early 1990s was likely 43 – 55% less than if a law had required all utilities to meet a specified emission target.[18]

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[18] CBO, *Issues in the Design of a Cap-and-Trade Program for Carbon Emissions*, 11/25/03, p. 1; http://www.cbo.gov/ftpdocs/48xx/doc4861/11-25-CapTradeBrief.pdf.

- The cost of reducing CO_2 emissions would be greater for lower income households than for higher income ones. Costs could be mitigated by selling the allowances and using the revenue to assist lower income households.
- Government distribution of allowances for free is "in effect, equivalent to collecting revenue from an auction of the allowances and then distributing the auction proceeds to those firms or individuals." (p 14)
- "Most analyses suggest hat a carefully designed program to begin lowering CO_2 emissions would produce greater benefits than costs." (p 4)

2. Design Considerations

Areas to be addressed include:

- Where in the CO_2 emission generation cycle should the allowances be issued?
- Should allowances be given away, auctioned or some combination?
- What should the initial levels be?
- If sold, what should the government do with the revenues? How might they be used to offset the costs to producers and consumers and to alleviate adverse economic impacts of the program?
- Should there be any ability to adjust the cap level while the program is operational? If yes, how?

There are several reports that address the above design issues and others. The CBO has several reports on this topic at http://www.cbo.gov/publications/collections/collections.cfm?collect=9.

5. *Emission Allowances versus a Carbon Tax*

- Carbon taxes have been used for many years in Sweden and a few other countries
- Enacted in Boulder, CO[19]
  - First in U.S.
  - Passed by voters in November 2006
  - Added to utility bills.
  - City estimates cost to average household = \$1.33/month and \$3.80/month for average business.
  - Expected to generate about \$1 million per year through 2012 when the tax expires.
- Congressman Dingell's Proposal of 2007[20]
  - \$50/ton carbon content of fossil fuels
  - Increased gas tax
  - Phase-out of mortgage interest deduction for homes over 3,000 square feet with some exceptions such as for green construction
- Some comparisons:

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[19] http://www.ci.boulder.co.us/index.php?option=com_content&task=view&id=6136&Itemid=169.
[20] http://www.house.gov/dingell/carbonTaxSummary.shtml.

	Taxes	Emission Allowances
Generate revenue	Yes	Possible
Help hit a target	No	Yes
Affect on prices	Increases	Increases
Substance	A tax	A tax[21]
Visibility to consumers	Probably	Degree depends on design
Political reality	Difficult to enact	Likely easier to enact

6. *Accounting*

- US GAAP
  - The FASB has opened a project on how to account for emission allowances given the growth in their usage at the state, national and international levels. For more information, see http://www.fasb.org/project/emission_allowances.shtml.
  - EITF 03-14, Participants' Accounting or Emissions Allowances under a "cap and Trade" Program
- Global Framework for Climate Risk Disclosure (10/06) – http://www.unepfi.org/fileadmin/documents/using_framework.pdf.
- International Accounting Standards
  - The International Accounting Standards Board (IASB) is studying accounting for trading of emission allowances. The study will consider whether the allowances are assets or liabilities (such as when received for free), how to account for the allowances when received and later, and overall reporting issues. The project will also consider the project to revise IAS 20, Accounting for Government Grants and Disclosure of Government Assistance.[22]

7. *International Considerations*

The U.S. and any states considering emission allowances will want to see how they can broaden the trading potential of their allowances by making them tradable with more parties. Such trading can raise tax issues as well as issues under the WTO rules.[23]

For more information

- Environmental Protection Agency (EPA) – http://www.epa.gov/climatechange/.
- National Resources Defense Council – http://www.nrdc.org/globalWarming/default.asp.
- California Climate Change Activities – http://www.climatechange.ca.gov/index.html.
- Climate Action Network Europe – http://www.climnet.org/index.htm.
- Pew Center on Global Climate Change; http://www.pewclimate.org.

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[21] Economist Dr. Greg Mankiw observes that a cap-and-trade system is basically a tax on carbon emission with the revenue benefiting the GHG-emitting businesses (http://gregmankiw.blogspot.com/2007/08/fundamental-theorem-of-carbon-taxation.html).

[22] IASB, http://www.iasb.org/NR/rdonlyres/D0D0B44A-254A-4112-9FCE-34178B236D07/0/Nov07ProjectUpdateERfinal.pdf.

[23] For an overview and analysis of potential issues under the WTO rules, see Alina Syunkova, National Foreign Trade Council, *WTO – Compatibility of Four Categories of U.S. Climate Change Policy*; 12/07; http://www.nftc.org/default/trade/WTO/Climate%20Change%20Paper.pdf.

- Congressional Budget Office – http://www.cbo.gov/publications/collections/collections.cfm?collect=9.
- Federal Trade Commission – http://www.ftc.gov/energy/.
- Calculate your carbon footprint – http://www.nature.org/initiatives/climatechange/calculator/.
- Michael B. Gerrard, Ed., *Global Climate Change and U.S. Law*, ABA, 2007.

Rev. Proc. 92-91 [pertinent law changes since 1992 are noted in shading (added by Prof. Nellen)]

1. PURPOSE

This revenue procedure provides guidance in a question and answer format on certain federal income tax consequences of the air emission allowance program (the "program") established pursuant to Title IV of the Clean Air Act Amendments of 1990, Pub. L. No. 101- 549, 104 Stat. 2584 (1990), 42 U.S.C. section 7651 et seq. (the "Act"), with respect to utilities, non-utilities that elect to participate in the program, and other persons that acquire, hold, or transfer sulfur dioxide emission allowances.

2. BACKGROUND

The purpose of the Act is to reduce the impact of acid rain through a program of annual allocations of sulfur dioxide emission allowances ("allowances") to certain fossil-fuel-powered combustion devices ("units"), such as boilers, owned by electricity generating companies ("utilities"). The program will be administered by the Environmental Protection Agency (the "EPA") with enforcement beginning in 1995. The Act also provides that other facilities emitting sulfur dioxide ("non-utility facilities") may elect to participate in the program by "opting in" under section 410 of the Act, 42 U.S.C. section 7651i. Persons other than utilities or non- utility facilities may also acquire, hold, and transfer allowances pursuant to section 403(b) of the Act, 42 U.S.C. section 7651b(b).

As provided under the Act, the EPA allocates the allowances to certain units that were operational on November 15, 1990 (the date of the enactment of the Act), and to certain units that become operational after the enactment date but before January 1, l996. The allocation is based, in part, on the 1985 – 1987 operating levels of each unit covered by the Act. In general, an allowance permits the unit to which it is allocated to emit without penalty one ton of sulfur dioxide. The EPA maintains an allowance account for each covered utility unit, for each non-utility facility that opts into the program, and for any other person that so requests. Only those allowances that are recorded by the EPA in a unit's allowance account as of the allowance transfer deadline for a given year may be applied against the unit's sulfur dioxide emissions during that year.

Except as otherwise provided by the Act, an allowance may be (1) applied against sulfur dioxide emissions occurring in the year to which it has been allocated by the EPA, (2) transferred, (3) sold or exchanged, or (4) held for and applied against sulfur dioxide emissions occurring in a future year. An allowance, however, may not be applied against sulfur dioxide emissions occurring in a year prior to the year to which it has been allocated by the EPA.

Under the Act, the owner or operator of the unit, through the unit's designated representative, must account to the EPA for the total tons of sulfur dioxide emitted by that unit during a calendar year. The designated representative has until the allowance transfer deadline, which occurs at the end of a specified period of time after the close of that calendar year (the "make-up" period), to acquire and record with the EPA allowances sufficient to equal the emissions during that calendar year.

The Act prohibits the operation of any unit in a manner which causes that unit to exceed its sulfur dioxide emission limitation. A unit's emission limitation equals the number of allowances in the unit's allowance account that may be applied against sulfur dioxide emissions of that unit during that calendar year. Each ton of sulfur dioxide emitted by the unit in excess of its emission limitation is a separate violation of the Act. Under section 411 of the Act, 42 U.S.C. section 7651j, the owner (or operator) must pay a $2000

penalty to the EPA for each excess ton emitted. In addition, pursuant to that section, the EPA will reduce a subsequent year's allocation of allowances for the unit by the number of allowances equal to the excess tons emitted. Moreover, emission of excess tons may subject the owner (or operator) of the unit to both civil and criminal penalties under the general enforcement provisions of the Clean Air Act.

Section 416 of the Act, 42 U.S.C. section 7651o, directs the EPA to withhold from issuance a small percentage of allowances allocated under the Act to each unit for a particular year. The purposes of this withholding include ensuring that certain power producers (such as the independent power producers and certain utilities that were not operational before November 15, 1990) that are not allocated any specific allowances under the Act can obtain sufficient allowances to apply against their emissions, and stimulating the market for allowances. These withheld allowances will be deposited in two reserves, one for direct sales and one for auction sales. The proceeds from any sale (direct or auction) will be distributed on a pro-rata basis to the designated representative of the units from which the allowances were withheld. Unsold current-year allowances in the direct sale reserve will be transferred periodically to the auction reserve for sale at the next auction. Unsold allowances remaining in the auction reserve will be returned periodically on a pro-rata basis to the designated representative of units from which the allowances were withheld.

Rev. Rul. 92-16, 1992-12 I.R.B. 5, holds that the allocation of emission allowances by the EPA to a utility does not cause a utility to realize gross income under section 61 of the Internal Revenue Code. Accordingly, a utility's basis in those emission allowances under section 1012 is not measured by reference to the fair market value of the allowances.

To help the Service provide additional guidance on the federal income tax consequences of the emission allowance program, Announcement 92-50, 1992-13 I.R.B. 32, requested public comments on certain tax issues arising from that program that were identified for study. The comments submitted have been carefully considered and the following guidance is provided. Although questions 1 – 7 below are directed to utilities, the federal income tax consequences for non- utility facilities that opt into the program under section 410 of the Act are similar to those for utilities. Therefore, the answers to questions 1 – 7 generally apply to non-utilities as well as utilities.

3. QUESTIONS AND ANSWERS

Q-1: How are the costs of acquiring or holding an emission allowance treated for federal income tax purposes?

A-1: The costs incurred to acquire or hold an emission allowance must be capitalized because the allowance has a useful life substantially beyond the taxable year to which it is allocated. These costs, including any amounts paid to acquire or hold an allowance (such as the purchase price and any properly allocable legal, accounting, and engineering fees), constitute the holder's tax basis in an emission allowance under section 1012 of the Code.

Q-2: Can emission allowances be depreciated under section 167 of the Code?

A-2: An emission allowance is not subject to depreciation under section 167 of the Code. Although an emission allowance confers on its holder the right to emit one ton of sulfur dioxide during a particular calendar year, the emission allowance does not expire in that year if it is not applied against sulfur dioxide emissions, but carries over, without limitation, to subsequent years. Thus, an emission allowance has no ascertainable useful life over which it could be depreciated. Further, it is not subject to gradual exhaustion, wear or tear, or obsolescence over some determinable life within the meaning of section 1.167(a)-1 of the Income Tax Regulations, and its useful life is not limited as required by section 1.167(a)-3. Therefore, a unit-of-production method of depreciation is not appropriate.

NOTE: In 2004, Reg. 1.167(a)-3(b) was modified. This regulation now reads:

(a) In general. If an intangible asset is known from experience or other factors to be of use in the business or in the production of income for only a limited period, the length of which can be estimated with reasonable accuracy, such an intangible asset may be the subject of a depreciation allowance. Examples

are patents and copyrights. An intangible asset, the useful life of which is not limited, is not subject to the allowance for depreciation. No allowance will be permitted merely because, in the unsupported opinion of the taxpayer, the intangible asset has a limited useful life. No deduction for depreciation is allowable with respect to goodwill. For rules with respect to organizational expenditures, see section 248 and the regulations thereunder. For rules with respect to trademark and trade name expenditures, see section 177 and the regulations thereunder. See sections 197 and 167(f) and, to the extent applicable, §§1.197-2 and 1.167(a)-14 for amortization of goodwill and certain other intangibles acquired after August 10, 1993, or after July 25, 1991, if a valid retroactive election under §1.197-1T has been made.

(b) Safe harbor amortization for certain intangible assets.

(1) Useful life. Solely for purposes of determining the depreciation allowance referred to in paragraph (a) of this section, a taxpayer may treat an intangible asset as having a useful life equal to 15 years unless—

(i) An amortization period or useful life for the intangible asset is specifically prescribed or prohibited by the Internal Revenue Code, the regulations thereunder (other than by this paragraph (b)), or other published guidance in the Internal Revenue Bulletin (see §601.601(d)(2) of this chapter);

(ii) The intangible asset is described in §1.263(a)-4(c) (relating to intangibles acquired from another person) or §1.263(a)-4(d)(2) (relating to created financial interests);

(iii) The intangible asset has a useful life the length of which can be estimated with reasonable accuracy; or

(iv) The intangible asset is described in §1.263(a)-4(d)(8) (relating to certain benefits arising from the provision, production, or improvement of real property), in which case the taxpayer may treat the intangible asset as having a useful life equal to 25 years solely for purposes of determining the depreciation allowance referred to in paragraph (a) of this section."

(2) Applicability to acquisitions of a trade or business, changes in the capital structure of a business entity, and certain other transactions. The safe harbor useful life provided by paragraph (b)(1) of this section does not apply to an amount required to be capitalized by §1.263(a)-5 (relating to amounts paid to facilitate an acquisition of a trade or business, a change in the capital structure of a business entity, and certain other transactions).

(3) Depreciation method. A taxpayer that determines its depreciation allowance for an intangible asset using the 15-year useful life prescribed by paragraph (b)(1) of this section (or the 25-year useful life in the case of an intangible asset described in §1.263(a)-4(d)(8)) must determine the allowance by amortizing the basis of the intangible asset (as determined under section 167(c) and without regard to salvage value) ratably over the useful life beginning on the first day of the month in which the intangible asset is placed in service by the taxpayer. The intangible asset is not eligible for amortization in the month of disposition.

(4) Effective date. This paragraph (b) applies to intangible assets created on or after December 31, 2003.

In addition, IRC §197 was added in 1993 to allow for 15-year straight-line amortization of certain acquired and created intangibles.

Q-3: How and when will a utility recover its basis in an emission allowance if that allowance is applied against sulfur dioxide emissions occurring in a particular year?

A-3: A utility will generally be permitted to recover its basis in an emission allowance that is applied against sulfur dioxide emissions occurring in a particular year by deducting the amount of its tax basis in that emission allowance in the year that the sulfur dioxide was emitted. Despite this general rule,

however, capitalization will be required in certain instances. See, e.g., sections 263 and 263A of the Code which provide for the capitalization of otherwise deductible expenses in certain instances. If the utility acquires an emission allowance after the end of a calendar year during the “make-up” period provided by the EPA regulations and applies that allowance against the preceding year’s emissions, the recovery of its basis in the emission allowance will be determined under the principles of section 461 of the Code.

Q-4: How and when will a utility recover its basis in an emission allowance if the utility sells or exchanges an emission allowance?

A-4: Generally, a utility will recover its basis under section 1001 of the Code on the sale or exchange of an emission allowance. Therefore, a utility will realize capital gain or loss on the sale or exchange of an emission allowance to the extent of the difference between the amount realized and the utility’s adjusted basis in that allowance. If, however, the utility is holding an emission allowance primarily for sale to customers in the ordinary course of a trade or business of dealing in allowances, any gain or loss realized from the sale or exchange will be ordinary. The utility will recognize gain or loss in the year of the sale or exchange, unless a nonrecognition provision of the Code (such as section 1031) applies.

IRC §1221(a)(8) was added to the IRC by the Ticket to Work and Work Incentives Improvement Act of 1999 (PL 106-170, 12/17/99). This new category of items that are not capital assets is “supplies of a type regularly used or consumed by the taxpayer in the ordinary course of a trade or business of the taxpayer.”

PLR 200728032 held that sulfur dioxide emission allowances where not a supply under IRC §1221(a)(8) primarily because they are not tangible personal property. The facts of the PLR indicate that “Taxpayer buys and sells emission allowances periodically as needed with the intent to maintain a portfolio of emission allowances to satisfy the requirements of the Act.” The PLR did not address whether the allowances fall under any other non-capital asset category of §1221(a), such as property held for sale in the ordinary course of a trade or business.

Q-5: Is an exchange of emission allowances an exchange of like- kind property that qualifies for nonrecognition treatment under section 1031 of the Code?

A-5: Emission allowances, regardless of the year to which the allowances are allocated by the EPA, will be treated as like-kind property for purposes of section 1031 of the Code. Therefore, an exchange of emission allowances that would otherwise result in a taxable event and the recognition of gain or loss under section 1001 is an exchange of like-kind property that qualifies for nonrecognition treatment under section 1031, provided that the requirements of that section are otherwise satisfied.

Q-6: Is the withholding and sale by the EPA of allowances allocated to the units under section 416 of the Act treated as an involuntary conversion of the withheld allowances for purposes of section 1033 of the Code?

A-6: The withholding and sale by the EPA of allowances allocated to the units under section 416 of the Act will be treated as an involuntary conversion of the withheld allowances for purposes of section 1033 of the Code. In addition, the purchase of other allowances for the purpose of replacing the withheld allowances will be treated as the purchase of property similar or related in service or use to the withheld allowances. Thus, the nonrecognition treatment of section 1033 may be elected with respect to these withheld allowances, provided that the requirements of that section are otherwise satisfied.

Q-7: Is the $2000 per ton “penalty” paid to the EPA under section 411 of the Act for emissions in excess of a unit’s emission limitation deductible under section 162(a) of the Code?

A-7: The purpose of the $2000 per ton penalty imposed by section 411 of the Act is punitive as indicated by the legislative history accompanying the Act. See H. R. Rep. No. 490 (Part 2), 101st Cong., 2nd Sess. 5 (1990). Thus, this exaction is a penalty within the meaning of section 162(f) of the Code and section 1.162-21 of the regulations, and is not deductible under section 162(a). However, the reduction of future emission allowances under section 411 of the Act as a result of excess emissions is not a penalty within the meaning of section 162(f) and will not preclude any deduction of the basis of those allowances in the year of the reduction.

Q-8: What are the federal income tax consequences of participation in the emission allowance program by a person that is an investor or trader?

A-8: The federal income tax consequences for questions and answers 1, 2, 4, and 5 are the same as for a utility. Questions 3, 6, and 7 do not apply.

4. EFFECTIVE DATE

This revenue procedure is effective November 16, 1992.

Rev. Rul. 92-16

FACTS

Title IV of the Clean Air Act Amendments of 1990, 42 U.S.C. section 7651 et seq., establishes a program of sulfur dioxide emission allowances to be allocated annually to certain electricity generating companies ("utilities") commencing in 1995. This program will be administered by the Environmental Protection Agency.

HOLDING

The allocation of emission allowances by the Environmental Protection Agency and their receipt by a utility pursuant to 42 U.S.C. section 7651b (a) does not cause the utility to realize gross income under section 61 of the Internal Revenue Code. Accordingly, under section 1012 of the Code, a utility's basis in those emission allowances is not measured by reference to the fair market value of the allowances.

Question 12 – Acme Garbage Company acquired a large piece of land suitable for dumping garbage. Once the site is full, it will be converted to a park and sold. AGC paid $3 million for the land and estimates that its value when full, but prior to being converted into a part will be $1.2 million. What types of asset did AGC acquire? Is the air space a §197 intangible? Is anything depreciable?[24]

[24] *Browning-Ferris Industries*, TC Memo 1987-147.