# Electronic Media Issues

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*Examination of practical intellectual property problems related to developing a multimedia museum exhibition catalog*

This paper will address intellectual property issues in developing a multimedia museum exhibition catalog. I will refer to the hypothetical product as a digital exhibition catalog to be marketed under the trademark "Arti-Facts."

It is planned that image and text will be placed into the catalog from museum collections. These collections are soon to include text prepared by museum curators, both employees of the museum, as well as consultants or "contract" individuals who are hired on an hourly basis. It is also assumed that some of the images will be owned by the museum, developed by or for the museum with appropriate transfer of ownership to the museum. Images could also include those previously or currently licensed by the museum from others (i.e. images owned by third parties).

Prior incoming license rights might be impacted by the scope of the previously negotiated license. An example is the incoming images might have previously been licensed to be used "for all museum purposes for notecard and posters." Accordingly, it is conceivable that such a previously negotiated scope might be too narrow and renegotiation with a variety of licensors might be required in order to have clear authority to develop a digital exhibition catalog including the images, since such a digital catalog is arguably not included within a scope of use for "notecards and posters."

Further licensing issues would relate to whether the museum is contemplating additional projects in the future or whether negotiations would be carried out with only a digital exhibition catalog in mind. Additional issues include whether the museum would have rights to distribute the digital catalogs, either via physical media such as compact disks or the like, or via electronic distribution such as via the Internet e-mail system.

### ◄ Digital Catalog ►

A digital exhibition catalog such as the one contemplated would likely be driven by underlying software that might be commercially available from standard retail sources. Assuming this were the case, and assuming further that one-run time copy might be needed for each workstation on which the digital exhibition catalog were to be viewed, a one-copy of software per workstation purchase would likely be required.

Alternatively, a special negotiated license (e.g. a cite license), could likely be negotiated with a standard commercial software supplier, and such a license could contemplate distribution to the workstations, whether or not they were linked by a network and a server.

It is also possible that customized software might need to be developed by or for the museum. In this regard, it is possible that some museums, perhaps increasingly so, would have a sophisticated information services department that might include computer programmer employees, as well as hourly consultants or other contract help.

Whether or not the software driving the digital exhibition catalog was made up of standard commercial software, custom developed software, or a combination of both, it would likely include database software for accessing the various text and images included in the catalog, word processing software for making changes to the text and images, spreadsheet software for demonstrating numerical relationships and other calculations, and possibly presentation software for developing customized presentations, e.g. for use in a repetitive, self-monitoring mode on workstations, with either automatic playback or which with an interface permitting dynamic interaction with museum patrons.

Thus, the underlying software driving the exhibition catalog may need to be acquired through typical acquisition agreements. Such agreements may address the museum's right to not only use the software, but to modify it and possibly distribute it.

### ◄ Customized Development ►

For example, if the museum undertakes a customized development, the rights that the developer (assuming the development is done by a third-party company) grants to the museum might differ substantially, depending on whether the software house had previously developed similar systems in which it had retained rights of further modification and use for additional customers.

In such a case, the software house may be unwilling to grant ownership of the software to the museum and might only permit use of object code by the museum, with rights of modification only being available through further services of the vendor.

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On the other hand, it is possible that the vendor would be building the system from the ground up for the museum, in which case, while costs might be higher, the vendor may be willing to provide the museum with outright ownership of the software, including transfer of the source code for use by museum programmers to maintain and further develop the software.

The media on which the digital exhibition catalog is to exist could include a variety of possibilities, including an online system based on accessing a server housing the master digital representation, with online distribution to workstations, an implementation through CD ROM, or other possibilities.

Further, in addition to development of the software to support the system, the services of a vendor may be required to integrate the museum images and text into the software, and it may be appropriate that an ongoing relationship be established with the vendor for regularly upgrading or installing images and text into the system, for example, as additional images and text are generated by or licensed into the museum.

A further consideration might be the need for a publisher. This might be a company that would reproduce CD ROM disks or the like for use within the museum or for distribution outside of the museum. Issues in such an agreement would include whether the publisher would simply reproduce the catalog based on a master provided by the mum or another vendor, whether it would assist with distribution, and would assist with marketing efforts.

Other issues in such an agreement would be whether the vendor would have exclusive rights to reproduce or distribute for the museum. Note that exclusive rights (as opposed to sole rights) to the vendor *excludes* the museum from carrying out the same tasks. While granting such exclusive or sole rights to the vendor might result in a lower price in a museum, it would require provisions in the agreement with the publisher that it could reliably meet the forecasted requirements of the museum, if not actual requirements, with provision for the agreement to become nonexclusive, if that the publisher could not comply with these requirements.

The publisher, on the other hand, in order to provide a reduced rate for an exclusive relationship, would likely require that the museum promise a minimum level of requirements.

## ◄ Contracts ►

Applicable intellectual property rights that may require contracts — including possible negotiations, with vendors, employees, and consultants — include patent rights, copyright rights, trade secret rights, and rights in trademarks and service marks. In this regard, it is likely commonplace in today's environment, if it was not already so, that museums have employment agreements with all employees who may be creatively involved in handling the intellectual property rights of others, or in creating intellectual property rights for the museum.

For example, such agreements typically provide that the employee will safeguard three intellectual property rights. These include trade secrets and other confidential and proprietary information of third parties who entrust such information to the museum. For example, the museum may agree with a vendor to take in certain information or software on a confidential basis. Such vendors typically require that the museum have agreements with all of its employees, consultants and other participants binding these individuals or other parties to this confidentiality requirement.

A further example of revisions include a promise by the employee, consultant or other person or party to refrain from knowingly using the intellectual property rights of others in works or projects created for the museum. In addition, such agreements provide for the assignment of all intellectual property rights, traded by the employee or other individual during the course of employment to the museum.

With respect to the intellectual property rights that might arise in the Arti-Facts Digital Exhibition Catalog, software developed for the museum might be protected through both utility patents and design patents. Utility patents protect the utilitarian, conceptual aspects of software, and design patents can be used to protect user interface icons and other ornamental features.

Copyright rights would apply to the museum catalog images, the museum catalog text, and the museum catalog software. The various types of copyright rights applying to both images and text would be controlled by the copyright owner, whether that be the museum or a vendor, and these rights would include the rights to prepare derivative works, cancellations, and other works based on the individual works.

The license agreements previously mentioned would govern who has what rights in the images and text. Similarly, copyright rights in the underlying software applies as a literal work to the code (whether in object or source code form) and possibly also to form a user interface features. Here again, copyright rights would need to be negotiated, for example, with respect to a vendor of customized software.

## ◄ Trade Secrets ►

Trade secrets might apply to algorithms in the software and to software source code listings. For example, if a software vendor providing the underlying software to the museum were to agree to release the software source code to the museum information services department, a very tight agreement would likely be required by the vendor. He would ensure that the algorithm and source code listings within would not be disclosed outside the museum and would be used only for purposes defined in the agreement.

The museum would likely want ownership of trademarks or service marks used in connection with the exhibition catalog. An example is the Arti-Facts name. It would be likely that the museum would seek clearance of the name from intellectual property counsel (so that an investment would not be put into using the name, only to find out that

the name might need to be changed). In addition, Federal Registrations, either on an intent to use or use basis, would likely be advisable, in order to perfect the ownership rights in the trademarks or service marks.

A wide variety of issues relates to the way in which intellectual property rights rest initially, whether ownership of the intellectual property rights stays with the person or company where the rights initially arise, whether ownership of such rights are ultimately transferred. Or, these various rights and the images, text, and software within the digital catalog can include rights vesting in or acquired by the museum, rights vesting in or licensed or acquired from a third-party company, or rights vesting in or licensed or acquired from a third-party individual.

These various scenarios can arise, depending upon whether the images, text, and software are developed by employees of the museum, third-party consulting companies or vendors, or third-party individuals.

### ◄ Software Patents ►

Regarding software patents, which are increasingly used to protect software systems of virtually all kinds, a U.S. patent grants the owner the right to exclude others from making, using or selling the patent to the invention throughout the United States during the term of the patent.

Patents in other countries provide similar rights. A software patent covers an invention embodied or implemented in software.

A wide variety of differing kinds of software can be patented. Almost any software-based invention may be a proper subject of patent protection. Typical software inventions include operating systems and functions, application packages and functions, data and signal processing systems, user interfaces and features, mathematical algorithms applied in a system or process, automated business systems, as well as improvements in any of these types of systems.

Areas particularly challenging to obtaining patent protection presently include essentially pure mathematical algorithms, other essentially pure scientific principles, and essentially pure methods of doing business. However, applied mathematical algorithms in other scientific principles can be patented, and systems for carrying out businesses can be patented, e.g. a hotdog stand improvement can likely be patented, although the idea of selling hot dogs in the street could never have been patented.

In addition to protecting the utilitarian software invention like those described above, design patents can be used to protect ornamental features of screen displays such as icons or other ornamental screen features.

### ◄ Time Lines ►

Whether the patent protection being sought involves utility patents or design patents, very important time lines exist with respect to when the patent applications must be filed.

In the United States, there is a one year grace period triggered by, for example, placing the invention on sale or offering it for sale, publishing a description of the invention, or placing the invention in commercial use (whether public or secret).

Canada has a similar one year grace period, triggered by publication of the invention. Most other countries, however, have what is called an "absolute novelty" standard, typically triggered by publication.

With respect to such absolute novelty countries, once there has been publication of an invention, there can no longer be a valid patent application filed. However, most industrialized countries honor a worldwide treaty that provides the benefit of the filing date in the country where the inventors reside.

For example, if a United States patent application is filed prior to public disclosure of the invention, most industrialized nations will grant the right to later file applications in those countries, using the benefit of the U.S. filing date. Such subsequent applications must typically be filed within either a six-month (for design patents) or one-year (for utility patents) period. One exception to this is the country of Taiwan, which does not honor the worldwide convention used by most other countries. In Taiwan, the application must be filed in the country of Taiwan prior to any public disclosure of the invention, in order to obtain a valid patent.

Many of you may have heard of recent hearings and requests for comments conducted by the U.S. Patent and Trademark Office (PTO) with respect to patents on computer-based inventions such as software. While some persons who have heard of these hearings may be concerned that the result could possibly be a drastic change in the patent laws of the United States with respect to protecting software and other computer related inventions, drastic change is very unlikely. It is the intent of the new commissioner of patents and trademarks to only fine tune the system, and make it more adaptable to the fast changing technology of computers and software. This includes issues related to the fact that relevant prior art is sometimes difficult to uncover when software patent applications are filed or issued.

In this regard, one proposal of the commissioner is to make more readily available reexamination procedures that can be instigated by the applicant or third parties in the event that more relevant prior art is discovered over and above the prior art that was known to the applicant and before the PTO during proceedings to obtain the patent.

As indicated, patent, copyright, and trade secret laws typically combine to provide intellectual property protection for software-implemented multimedia systems such as a digital exhibition catalog for a museum. Accordingly, as indicated, patents and copyrights apply. However, even though both types of protection are important, there are many advantages to patent protection over copyright protection.

For example, copyright law cannot be used to protect ideas, systems, or methods, of operation. Further, independent development is a complete defense to copyright infringement but not to patent infringement. For example, two creators independently creating separate works without the access of one to the other can individually have their own copyright in their own work without infringement of the other person's or party's copyright.

That is because copyright law is based on copying, which is usually proven by the person asserting the rights based on access to the original party's copyrighted work and a substantial similarity in the work of the infringer, based on a comparison to the original party's copyrighted image, text, or software program.

Here again, the comparison must be made to copyrightable subject matter. Nevertheless, it is important to remember that both patent and copyright protection are very useful in protecting technologies such as a digital multimedia system. In other words, the two types of protection are not mutually exclusive and typically both are used for software system intellectual property protection.

Trade secret protection might apply to multimedia systems. Most typically, such protection might apply to the underlying software, such as in algorithms used within the software system or with respect to the source code listing, the human readable listing of the software program.

Such listings typically disclose many of the tricks used by the programmer in making the program work, as opposed to software object code, which cannot typically be read by human beings. Accordingly, whenever source code is disclosed it is subject to strict confidentiality constraints, typical of those used in trade secret agreements.

### ◄ Limited Protection ►

Unlike the owner of a patent, the owner of a trade secret cannot prevent others from independent obtaining or developing the invention, by lawful means, and using it. Thus, many "trade secrets" quickly diffuse their way into the pool of general industry knowledge, such as by software programmers moving from job to job and trading experiences with one another.

While such trading of experiences might be illegal from the standpoint of agreements signed by these individuals, the culture of software companies is still developing with respect to honoring such intellectual property rights, or even knowing about them. Accordingly, while trade secrets can be difficult to license or maintain, a patent can provide a clean definition of a licensed subject matter, and is enforceable against anyone practicing the invention, whether the party developed it independently or not.

It is frequently said that patents are not subject to independent development defense, whereas copyrights and trade secrets are.

Strategic reasons to obtain software patents include both defensive and offensive purposes. A patent portfolio can be invaluable as a cross-licensing vehicle. It can be used defensively to discourage hostile intellectual property owners, or as an asset in the sale of a business, or as an offensive weapon. For many companies, the most important function of a patent portfolio is its use in cross-licensing.

For example, if two companies are in a similar technology area, both companies may develop significant patent portfolios with respect to their own inventions. When one company comes to the other to enforce its patents, the other company will be far better off if it has patents of its own in similar technologies, since it can typically fight back with them, or cross-license with the party asserting its patents.

Accordingly, it can be seen that software patent portfolios have a very high value for not only offensive purposes, but for defensive purposes as well.

A variety of contract issues have been alluded to with respect to the development of a software-based multimedia digital exhibition catalog for a museum. We have noted that the scope of incoming rights to the museum (licensing-in rights, or bringing ownership in) are of significance. We have also touched on the fact that the scope of outgoing rights (the right and ability to license to others outside the museum) can be important as well.

### ◄ Indemnification ►

Whichever type of licensing is occurring, it is important for the parties to be extremely vigilant with respect to issues such as warranty of title and indemnity for an intellectual property infringement of third party rights. For example, it is important when acquiring images, text or software from third parties to know that they truly have the right to provide the license or ownership being granted to the museum. Sometimes, clauses in these kinds of contracts include the party providing the rights indemnifying the licensee against costs related to suits by third parties against the licensee for infringement of third party rights.

Of course, such indemnity is only as valuable as the licensor is financially solid, and it is extremely important to work with reputable and credible suppliers. This is of course extremely complex in areas such as images, which may be derived from a wide variety of sources, each of which must be individually cleared with respect to intellectual property rights, typically copyright rights.

Work-made-for-hire issues are also sometimes complex. For example, software does not fit within what are designated in statutory law as categories considered available for "work-made-for-hire" status. While this is not typically an issue with employees working within the scope of employment, it is particularly important with third-party consultants (individuals or companies) providing services that might involve intellectual property rights.

Often, it is specified that, to the extent applicable, the work being created is to be considered a "work-made-for-hire" under U.S. statutory law, but in any event will be assigned by the creator to the parties seeking the right, e.g. the museum.

As previously indicated, it is important to have such agreements with employees, third-party individuals, and third-party companies. In this connection, vigilance must be maintained to acquire or obtain licensing rights to all intellectual property applicable to the subject matter at hand. As we have seen, this can often include all of the typical areas of intellectual property law, including patents, copyrights, trade secrets and trademarks.