THE PROTECTION OF INTELLECTUAL PROPERTY UNDER ISLAMIC LAW

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INTRODUCTION

This article assesses the potential effect of the resurgence of traditional Islamic law on substantive intellectual property law in predominantly Muslim countries. [FN1] One of the current issues in developing countries is the protection of intellectual property as a handmaiden to development. [FN2] Since approximately one fifth to one sixth of the world's population is Islamic and Islam is the dominant religion and forms the foundation of the legal system in countries ranging from Central Africa through North Africa through West Asia and South Asia and on to Indonesia, understanding what, if any, impact Islamic law might have on the ability of those countries to protect intellectual property is important in undertaking foreign investment and development. Islamic law is highly developed and, with the current refocus within the Islamic world on Islamic law as means of ordering society, the issue considered in this article has some immediacy. This topic is of more than academic interest because the ongoing tension between fundamentalist Muslim political movements and mainstream, practical Muslim governments creates the potential for significant changes in the law away from European code models toward more shari'a-based models for the foreseeable future. [FN3] This concern is real because, for example, in 1971 the Constitution of Egypt was amended to change Islam from being a source of law to being the *1080 source of law. [FN4] Although this constitutional change has not yet affected general intellectual property law in Egypt, some areas, particularly licensing and biotechnology, have the potential for being significantly affected.

This article will examine legal protection of intellectual property within the framework of basic Islamic legal structures and principles, with particular focus on (1) the role of governmental regulation under the shari'a [FN5] and (2) various substantive shari'a principles of law with primary focus on several discrete aspects of the fields of property law, contract law, and conceptions of the public interest. Rather than rely on abstract principles or generic principles of intellectual property law, the intellectual property law of Egypt, particularly its copyright and patent law, will be examined in light of the shari'a. The law of Egypt was chosen because it is well developed, it has been the source of much of the intellectual property law in other Arab Muslim countries, and it reflects some Islamic principles in its provisions. [FN6]

This article first very briefly presents background information about the sources of current law in Arab Islamic countries and then summarizes some basic concepts in Islamic law which may affect intellectual property law. The next section examines intellectual property law in general and Egyptian copyright and patent laws in specific in light of the shari'a. The concluding section restates several of the most significant conclusions of this article which are of general concern for providers of intellectual property in the concluding section.

I. ISLAMIC LAW

A. Sources of Law in Arab Islamic Countries

The law in Islamic countries may be thought of as being composed of at least two parts-shari'a and non-shari'a. The shari'a, or Islamic law, in either its codified or uncodified form, [FN7] has four proper sources: *1081 the Quran, the sunna (traditions based on the hadith or sayings and actions of the prophet), ijma (consensus on a point of law), and givas (a species of strict analogical reasoning). To establish direct support for a legal proposition one should be able to point to a verse of the Quran, or at least a tradition or hadith of the prophet Muhammad. If that is not possible, then if one can find a point in time when all legal scholars agreed on a particular point of law or interpretation, consensus may be relied upon as a valid source of law. [FN8] Use of analogical reasoning, or qiyas, is quite strict. First, one must find a verse in the Quran, a sunna of the prophet, or a rule on which consensus was achieved as the point of departure. Then the direct cause or purpose, narrowly conceived, must be determined, and the relationship between the two concerns, the one in which there is a rule and the one to which one is considering extending the rule, must be elucidated in such a way as to demonstrate that the rule should be extended. For example, the Quranic prohibition on drinking wine extends to other alcoholic beverages. The reason for the rule is obvious and it is extended without concern about gray areas. On the other hand, the relaxation of the duty to fast in cases of illness and traveling cannot be extended so easily. Looking to the concept of hardship is not helpful because travelers would not always find fasting a hardship and hardship is very broad and fuzzy. The divine purpose or cause of the rule is not mere hardship and extension of the relaxation would not be discrete or defined. For purposes of this article, a full understanding of givas is not necessary since the type of analogies being drawn below are concerned not with extending the shari'a, but rather with showing consistency between the shari'a and the Egyptian scheme of protection of intellectual property.

There are five types of conduct under the shari'a: mandatory, recommended, permitted, recommended against, and banned. [FN9] Saying prayers, certain taxes or donations for the poor, and many other actions are mandatory. [FN10] Certain actions, like making a will, are suggested or highly recommended, but not mandatory. [FN11] Some things, like imbibing alcohol, are strongly recommended against in the Quran, but are not *1082 banned by it, [FN12] (although generally, in Islam, drinking alcohol is banned) while the eating of certain foods is prohibited outright. [FN13] Engaging in commerce is recommended, but usury is banned. [FN14] Many things are expressly permitted. For example, travelers are allowed to relax fasting and other requirements under the theory of necessity born of hardship. [FN15] Many more practices are permitted because the Quran and other sources of shari'a law are silent on them. Generally speaking, protection of intellectual property would fall into this last category of permitted action because of the lack of any express statements about it.

In general, one should distinguish among (1) areas about which Islamic law has spoken with a relatively full voice, such as spiritual duties, personal status, and inheritance, (2) areas where Islamic law has provided some general principles, but with many lacunae, as in contract law with its general injunction to fulfill all obligations [FN16] and its general prohibitions on usury and

indefiniteness, and (3) areas where Islamic law is silent, such as in the field of intellectual property. In the latter two areas, and in particular the third area, Allah's representative among his people, the Caliph, or in more modern terminology, the government, is free to act provided the laws promulgated do not run afoul of shari'a prohibitions and are consistent with shari'a principles. [FN17]

The second type or source of law in Islamic countries, the non-shari'a law, refers to those areas of law needed to run a modern state, but about which the Quran and other sources of Islamic law are silent, or at least too vague to structure a modern, complex society. [FN18] For example, modern commercial transactions, financing arrangements, and limited liability commercial entities such as corporations, all require some positive law, but are not fully developed in shari'a law. [FN19] Indeed, the Quran is so general in some critical areas of law, including most of criminal law, that from the earliest times governments in Islamic lands have promulgated laws to fill the many open areas. [FN20] To fill the gaps in shari'a law, during the last 150 years most Arab Islamic states have adopted some form of European-style legal code to govern *1083 commerce and business while leaving other matters such as personal status, marriage, and inheritance to relatively pure Islamic law. [FN21]

The two conclusions reached in this section are direct, but not trivial: (1) The protection of intellectual property is neither prohibited nor mandated in the shari'a, and (2) consequently, the state can protect intellectual property under its powers to regulate human society in a manner consistent with Islamic law.

B. Selected Aspects of Islamic Law

This section considers discrete aspects or precepts of Islamic law which relate in some manner to aspects of protection of intellectual property. The legal principles will be considered under three headings: property, contract, and public interest.

1. Property

There are three main aspects of Islamic property law to be considered because of their importance to protection of intellectual property: the recognition of the concept of private property, the creation of title by creative endeavor, and the divisibility and separability of various property rights attendant to ownership.

Islamic law recognizes the right to private property. In a sense, "private" ownership is a misnomer since all of the property actually belongs to Allah. The Quran provides, through Moses' words to his people in Egypt, "Lo! The earth is Allah's. He giveth it for an inheritance to whom He will." [FN22] Thus ownership is, in theory, more trusteeship or stewardship for Allah than complete title as it is known *1084 in the British common law. [FN23] Nonetheless, owners have complete and virtually absolute rights as against all but Allah. [FN24] According to Habachy, "All Muslim schools teach that private property and rights are inviolable in relations between individuals as well as in relations with the state." [FN25]

Private property under Islam has sacred protection as well as state-sanctioned protection. The

Quran admonishes followers not to "knowingly devour a portion of the property of others wrongfully." [FN26] This principle is followed to the point that a finder of lost or stolen property can never obtain title to it and is treated as a trustee for the benefit of the true owner. [FN27] Not surprisingly, title to property is protected not only in the case it is lost or mislaid, but also in the event it is stolen or usurped (ghasb) or taken or destroyed through a breach of trust (khinyanah). [FN28] The thief or converter of the property is liable for any loss that befalls the property from any cause whatsoever. A trustee of property is liable only for negligence in caring for the property or for breach of the trust. [FN29]

The second aspect of Islamic property law to be considered is how, under Islamic law, one obtains ownership, title, or an interest in property. One can acquire real property by "appropriation". [FN30] That is, if there is vacant, undeveloped land, then one may develop it and acquire title to it by doing so. The act of making unproductive land productive, of using something unused, creates ownership. Thus, the creative act of making something useful is recognized as a means of acquiring ownership even of real property.

Ownership of personal property, or movables, can be acquired through extracting and possessing metals from the ground, from possessing unowned goods such as timber [FN31] or grasses growing wild on *1085 public land, [FN32] or from hunting. [FN33] That is, if a person's effort in some sense creates or extracts the item, then that person owns it. [FN34]

The third aspect of property law of direct importance in protection of intellectual property is the divisibility and separability of property rights. For example, one may own the property, but then want to allow another to use it, without transferring complete title. Islam explicitly recognizes this divisibility for both real [FN35] and tangible personal property. [FN36] One can divide the use of an object (grazing on land, using a tractor, applying a patented idea to manufacture goods, using the copyrighted expression of a computer programming idea to run a computer) from the ownership (mulk) of the object itself (the land, the tractor, the patented idea, the actual expression- the computer program).

Islamic law did recognize that physical property on one hand and ideas on the other are conceptually separable, at least in the context of the hadd, the amputation of the hand of a thief, under certain limited circumstances, for things of certain minimum monetary value. [FN37] For example, the Hedaya provided that one does not amputate the hand of a thief for stealing a book because the thief's intention is not to steal the book as paper, but the ideas in the book, which was not tangible property. [FN38] However, the same source notes that stealing a book of accounts is "appreciable" property, and not just the paper and materials which make up the book. It must be noted that this particular rule is not Quranic, does not come from the traditions, is not based on consensus, and is not from the qiyas type of reasoning. That is, this rule comes from a commentary on the law written by a prominent jurist. [FN39]

*1086 Nonetheless, from this one reference it would appear that the idea of intangible intellectual property existed in some rudimentary form in ancient Islamic law. The treatment of a book of accounts as "appreciable" property of sufficient value to warrant the extreme punishment of amputation can only, in reality, be based on the value of the information contained on the paper, i.e., the intellectual property, the intangibles represented by those accounts.

Though one could, in theory, latch onto this brief commentary that ideas are not protectable, and seek to expand it to exclude protection for certain forms of intellectual property (especially patents and trade secrets), that expansion is neither compelled nor wise. Property concepts developed in the realm of criminal law where the whole point was to create legal doctrine to avoid the necessity of imposing the draconian penalty need not, under Islamic law, be expanded into general property law governing title and other protections granted in the civil as opposed to the criminal side of the law. The notation in the Hedaya itself contains the seeds of two different directions in the special treatment given books of account.

Admittedly, this is a somewhat facile treatment of what could be a significant problem for some Islamic jurists and ought not to be too easily ignored or dismissed, but the main focus of this article, that the four sources of the shari'a and all of the other jurists are silent on this point, supported by the fact that in modern times no one has raised this particular objection leaves this author with some confidence in the major conclusions of this article.

2. Contract

Turning from property law, several important aspects of contract law will be examined for later discussion regarding how they affect intellectual property transactions. The topics are sanctity of contracts, including states being bound by contracts or treaties; freedom of contract and flexibility with respect to contract forms; and indefiniteness (gharar).

Contracts or agreements are not only binding to Muslims, they are sacred. The Quran states, "O ye who believe! Fulfill your undertakings." [FN40] This phrase is uniformly treated as applying to all agreements not only between individuals, but also between a person *1087 and Allah. [FN41] All schools of Islamic jurisprudence concur that "Al Muslimun 'inda shurutihim" (Muslims are bound by their stipulations)." [FN42] The authority for primacy of the maxim pacta sunt servanda in Islamic law is massive and will not be redeveloped at any length here. [FN43] As stated by Habachy, a contract is "a Shari'a, that is, literally, a sacred law between the parties." [FN44]

States are bound to honor their treaties and contracts in the same manner that individuals are bound by their contracts. The Quran explicitly contemplates treaties and requires that they be respected. The Quran provides that "[f]reedom from obligation (is proclaimed) from Allah and His messenger toward those of the idolaters with whom ye made a treaty," [FN45] and " e xcepting those of the idolaters with whom ye (Muslims) have a treaty, and who have since abated nothing of your right nor have supported anyone against you. As for these, fulfill their treaty to them till their term. Lo! Allah loveth those who keep their duty (unto Him)." [FN46] The state is bound not only to its treaties with other states, but also to its contracts with others, including foreign persons. [FN47]

A related point concerns shari'a protection against expropriation or nationalization. In general, expropriation or exercise of eminent domain powers had been treated as improper under Islamic law, *1088 though actual experience has been mixed. [FN48] Today, the propriety of the use of eminent domain power for the public good with compensation to the affected individual is

accepted.

Parties in general have freedom of contract subject only to the requirement that the contract not be one forbidden in shari'a law and that the object of the contract be legal. [FN49] Indeed, contracts may cover any number of forms and need not be limited to pre-existing categories or forms. For example, the Arbitration Tribunal in the Saudi Arabia-Aramco Arbitration referred to the oil concession arrangement as an example of how parties can develop their own law through contract without undue formalities. [FN50] Custom and practice of the parties or the trade can also form a basis for enforceable contract rights. As stated in the Majalla, "What is directed by custom is as though directed by law," [FN51] and " a thing known amongst merchants is as though fixed by stipulation between them." [FN52]

The flexibility of Islamic law, in many though not all respects, to meet commercial realities is indisputable. The Majalla provides that "it cannot be denied that with a change of times, the requirements of the law change." [FN53] The ruling in the Aramco Arbitration recognizes this flexibility. [FN54] The flexibility is found in formulations such as the Quranic duty of "enjoining goodness and prohibiting evil-doing". [FN55] All good things are to be promoted, and evil things or hardship are to be prohibited or repaired; [FN56] " H ardship causes the giving of facility" [FN57] (meaning that hardship and difficulties give rise to relaxation of requirements and revision of the law), and, similarly, "necessities make forbidden things canonically harmless." [FN58] These sorts of arguments have been used by reformers to relax the prohibition against charging *1089 interest (riba) to meaning a prohibition against usury, or excessive interest. [FN59] Today, even Saudi Arabia allows banks to charge interest in commercial transactions. The fiction of calling charges finance charges or service charges set at a percent of the loan has been rendered unnecessary. [FN60]

The concept of indefiniteness (gharar) is a very important principle in Islamic contract law. Its full dimensions will not be developed here, but some understanding is useful in understanding the status of intellectual property licensing arrangements under Islamic law.

The Quran speaks of gambling, which it states is not proper. [FN61] The move from gambling to gharar is described by Noor Mohammed as follows:

The [A]rabic word "maisir" literally means getting something too easily, getting a profit without working for it, hence gambling. The initial prohibition against gambling in the light of the Prophet's tradition [sunna] of cleansing commerce of unconscionable practices, gives a wider meaning to the principle. [FN62]

Noor Mohammed then quotes Ali Yusuf Ali's commentary on the Quran to explain the scope of the expanded principle. [FN63]

[T]his idea of protecting the weak against exploitation by the strong led to the elaboration of a rule of general application, commanding that any transaction should be devoid of uncertainty and speculation, and thus, according to learned men and legal scholars, could only be secured by the contracting parties' having perfect knowledge of the countervalues intended to be exchanged as a result of their transaction, otherwise there is an unacceptable degree of gharar. Thus, what was intended *1090 to be a religious precept was transformed into a worldly rule which affects a great proportion of secular transactions.

The concept of gharar has not overly restricted the development of commercial law to fit the ever-changing needs of commerce. [FN64] For example, it does not apply to ordinary business risks. [FN65] However, insurance contracts are generally deemed to violate gharar, though this attitude may be changing in recognition that insurance of commercial ventures is often a way of reducing risk, rather than having real attributes of a bet or of gambling.

Modern doctrine holds that there are three basic attributes contracts should have to avoid gharar: (1) knowledge of the value of the subject matter of the contract; (2) knowledge of the characteristics of the subject matter; and (3) effective control by the parties over the subject matter of the agreement, that is, a domesticated animal or caged wild animal, not one in the wild. [FN66]

3. Public interest (Maslaha)

Because Islamic law is so pervasive in Muslim life, governing not only secular and commercial matters (muamlatt), but also sacred, moral and spiritual matters (ibadat), treating public interest and public policy as categories of legal principles separable from any other thread in the fabric of Islamic law is at best difficult and at worst distorting. Public policy and religious requirements, and indeed the whole moral code of Islam are bundled into a single package. Islamic law addresses matters ranging from the timing of daily prayers and prohibitions against eating certain foods to marriage, inheritance, and commerce. The main source of Islamic law proper, the Quran, speaks much more explicitly and completely about personal status and morality and an individual's relationship with Allah than it does about commerce.

Nonetheless, identification of a few general public policy concerns can inform one's understanding of positive law such as the Egyptian copyright and patent codes. [FN67] If public interest is drawn too broadly and too powerfully, it can be abused to remove protections for *1091 intellectual property on the grounds that the whole society has need of or could benefit by unrestricted use of the item. On the other hand, too narrow or restrictive a conception of public interest can lead to imbalance in favor of private rights against the public interest or welfare. [FN68]

One statement of public policy is the overriding goal of Islamic law of advancing the good and hindering evil. [FN69] Though there are differences of opinion in the various Islamic schools of jurisprudence as to the extent of the use of concepts of public interest in establishing and modifying the law, it is a very important source of law. Indeed, under the Maliki school, under certain circumstances, even a Quranic provision may be ignored or interpreted to be consonant with the public interest. [FN70] The Hanafi school adopted the view that if a Quranic text were based on a custom and either the custom changed or the place where it was to be applied changed, then the "text must follow suit and be modified accordingly." [FN71] In a number of instances, statutory law has been made subject to a general public policy or public welfare exception. [FN72] In such cases the content of the public interest is derived from the shari'a. [FN73]

Another area illustrating public interest at work is the law of abuse of a right. [FN74] Early

Islamic authorities were split on this point. Hanafi and Shafi'i authorities held that rights were absolute and the one exercising the right would be protected from liability. [FN75] Others disagreed. [FN76] The Majalla provided as a central maxim that "p ermission by the Canon Law excludes the liability to make compensation." [FN77] However, this right was not unlimited. One could not exercise one's own rights if to do so would cause excessive damage to another's property or person or would otherwise significantly adversely *1092 affect the rights of others. [FN78] The Egyptian Civil Code approaches the subject by first providing that anyone who lawfully exercises his or her rights is not liable to another damaged by the exercise. [FN79] However, the exercise must be lawful-an unlawful act is defined as one in which "the only intention is to injure another," or the interest to be achieved by the person exercising the right is so minor as to be "entirely out of proportion to the injury caused to another," or the interest to be achieved is unlawful. [FN80]

A related idea is caring for and sharing with those less fortunate or facing hardship. The Quran is filled with passages urging, and in places requiring, Muslims to be their fellow's keeper. [FN81] It is important to note that the urgings take the form of telling people to share their wealth, not that the wealth belongs to all. That is, the property rights and contract rights are strong and sacred, but there are policy-based tensions and religious injunctions affecting the exercise of those rights.

Another important policy or concept is that of the effect of hardship. Islam has its own version of "necessity is the mother of invention" in "[h]ardship (meshaqqat) causes the giving of facility." [FN82] The effect of hardship on relaxing certain Islamic ritual requirements, for example, for those who are ill or traveling, was already noted above.

Islamic law also has a number of equitable rules relating to the weighing of harms. For example, a private injury is permitted to avoid a greater public harm; [FN83] when the choice is between two harms, the lesser is to be preferred; [FN84] and avoidance of harm is preferred to acquisition of a benefit, e.g., a person can use his or her own property however he or she wishes, if the use does not harm another. [FN85]

Though soft and difficult to articulate, the concept of public good or public interest, maslaha, exists and is used. Perhaps the most famous example of its application was when Saudi Arabia used it to justify its eminent domain condemnation of property around the Qibla in Mecca to permit the state to better accommodate the masses of pilgrims each year.

*1093 II. THE SHARI'A AND INTELLECTUAL PROPERTY LAW

This part of the article first discusses some general concerns relating to the shari'a and intellectual property. It then considers the extent to which Egyptian copyright and patent statutes are consonant with the shari'a.

The shari'a does not specifically address protection of intellectual property. [FN86] Consequently, it is an area, like much of criminal law and commercial law, which can be, and ought to be, and has been regulated by the government. As discussed above, the power of secular governments to enact and administer laws has been recognized in Islam from the earliest of

times.

Although nothing in Islamic law would prohibit or limit legal protection of intellectual property in general, as is more fully developed below, certain principles do affect the nature and scope of the protections afforded. In fact, some principles of Islamic law tend to favor protecting intellectual property. For example, the strong level of protection given to owners of real property and tangible personal property argues in favor of protection of intellectual property. As discussed above, Islamic law treats property interests as very important and provides a high level of protection to owners. [FN87] Furthermore, shari'at principles of acquisition of a property interest are not violated by protecting intellectual property. As discussed above, one method to obtain title is to do a creative act or to take affirmative steps to get possession or control of some land or property. [FN88] The creation of something new, a new work of art, a new book, a new invention, a new computer program, is no less worthy of protection. The creation of the mind ought to be protected like a creation of the hands. Traditional concepts of property can easily be extended to intellectual property, and to do so is most consistent with the high value placed on property in Islamic legal systems. As will be seen below, in certain instances the intellectual property title is less full or given less complete protection than real or tangible personal property, but title is protected and such protections are consistent with Islamic law.

A matter of some concern arises because so many intellectual property transactions involve licensing of the technology or knowledge rather than an outright sale. [FN89] Licensing in general does not run afoul *1094 of the shari'a. Islamic property law has long recognized the divisibility of title into full ownership, possessory interests, and use interests, among others. [FN90] The central idea of licensing copyrighted or patented matter is that the copyright or patent holder retains the copyright or patent and licenses, through a non-exclusive or exclusive license, the use of the property, the knowledge, to another. The ownership is thus separated from the right of use. Such separation is fully consistent with Islamic law.

A more serious concern with licensing relates to indefiniteness (gharar). [FN91] A license is for the use of something. The parties must know the value of the intellectual property, must know what it is and what it does, and must have control of it. In other words, the property must either exist or the agreement must be to create it. For example, a person may contract with another to develop a software program to be created by some certain time in the future. A contract to develop software should not run afoul of gharar if it meets the following requirements. First, the requirements of the software program are adequately spelled out. Second, the parties can make some valuation of the software. Finally, one party to the contract must have control of the programming. This means the party plans to do the programming rather than hope a third-party will do it and then sell it to him.

The extent to which the subject matter of the transaction must be known to avoid indefiniteness can present problems where one does not wish to disclose the information before the contract is signed. This sort of reluctance arises because what is being transferred is the information-once the information is known to the prospective buyer or user, the inducement to sign the contract is reduced and perhaps nullified. The problem is most acute in areas involving trade secret protection and non-copyrightable and non-patentable knowledge. This problem also exists with respect to certain copyrightable material such as computer programs (which are copyrightable in

at least some countries). If the prospective licensee gets a functioning copy of the program before the transaction is consummated and this were deemed to be required by the need to know the product being purchased, then, given the ease of copying such programs, the prospective licensee may choose to forego the deal. Thus the principle of indefiniteness could well have an effect on the structuring of license arrangements. However, it should not ultimately prevent or limit the ability to enter into valid, binding and creative arrangements because of the Islamic *1095 reverence for the sanctity of contracts and the flexibility with which they can be structured. [FN92]

The protection against expropriation and protection against governmental breach is particularly important in the field of intellectual property and technology transfers. Many such deals are made directly with the state. Knowledge that the state itself is bound to honor contracts and treaties, including intellectual property law treaties to which Egypt has acceded, should make technology transfers more attractive. Other deals between Egyptian and foreign technology owners may involve transfers of technology, know-how or protected intellectual property that one may fear could be lost to expropriation or nationalization if the technology or product is important for a particular state's industry or welfare. Certain pharmaceuticals of benefit to the general public health could fall into this category.

In the balance of this section, I describe most of the salient features of the Egyptian copyright and patent laws and evaluate certain aspects of them in light of Islamic law. Egyptian intellectual property law provides protections in keeping with general international standards. A person's artistic or literary expression of a particular idea is protected from unauthorized duplication and distribution by Egyptian copyright law and creators of truly novel and useful inventions are protected against unauthorized use of the invention by others through Egyptian patent law.

A. Egyptian Copyright Law

For the most part the Egyptian Copyright Statute [FN93] is modeled on French law and is consequently very different in its particulars, and in some of its basic forms of protection, from United States law. The Act protects the "author of original works within the field of literature, art, and science, whatever their type, mode of expression, extent or purpose. [FN94]

Four things warrant attention from this simple statement. First, the author is the person protected in the first instance. Second, the Act protects original works; to be protected, a work must be the creative, new product of a person. In these respects Egyptian copyright law is completely in step with the now common international understanding of what copyright law protects in general.

The third item warranting attention is the very broad nature of the description of the sorts of works from which fields of endeavor may be covered under the law. The works can be from the fields of literature, *1096 art and science. The extent to which these terms are interpreted narrowly or broadly could dramatically affect the scope of copyrightable works. For example, if science were limited to pure science, and not technology, or art were limited to fine arts, then the scope would be quite narrow. However, no such artificial limits have been placed on the terms by Egyptian law.

The fourth item to note is that a work is copyrightable, regardless of the form, type, purpose, or extent of the work, provided only that it is an original, creative work in literature, art or science. This is a very broad type of protection which should include room for new technologies, such as works to be read by computer (e.g., encyclopedias on CD-ROM's), without concern for hypertechnical, dusty interpretations of words like "book" or "picture".

The Act lists a number of types of works which are explicitly within the protections of the statute, as well as a number of types of works which are not. Written works, paintings, drawings, architecture, speeches, music, photographs, maps, choreography, broadcast media, translations (from one language to another) and transformations into other media (for example, books into movies), and works of applied art are all explicitly protected. [FN95] Enumerated unprotected works include collections qua collections such as anthologies, collections of public domain material, and collections of government documents, such as laws and judicial decisions, except to the extent such collections are original or the result of "any other personal effort justifying protection." [FN96]

A potentially significant omission from both lists is computer software. The copyrightability of software has been accepted in Europe and the United States for some time, and copyright acts have been amended to include it explicitly. Recently, India and Brazil have added explicit protection for software. Egypt, like most developing countries and newly industrialized countries, has not yet explicitly included software within the ambit of copyright protection. Nonetheless, because the statute does not prohibit or exclude software from protection and because of the broad wording of Article 1, it could well be protected, much as software was protected in the United States under the general copyright act prior to the act being amended. However, non- Egyptian software developers have been reluctant to rely on such possibilities and would much prefer explicit provisions for protection before licensing their best technologies.

The Islamic treatment of the sanctity of contract coupled with its approach of flexibility of contracting should permit creative lawyers to *1097 fashion agreements which protect their clients, even if the legal protections for some ideas may be lacking. Use of contracts using a trade secret approach could be very beneficial. However, for fully disclosed technologies, such as patented processes, contractual protection could be of limited value.

Under the Copyright Act, the rights of the author include whether to publish, the method of publication, and the "exclusive right to pecuniary exploitation of his work in any form." [FN97] The right of exploitation includes all sorts of communication of the work including by performance, reproduction and distribution of copies, modification, and translation. [FN98] However, if the author does not translate the work into Arabic, the right to translate it into Arabic expires after five years [FN99] instead of the general term of protection of life plus fifty years. [FN100]

Egyptian copyright also includes the moral rights concepts of claiming authorship and of opposing mutilation or modification of the work. [FN101] This aspect of the law is decidedly European in flavor, though it is not inconsistent with Islamic law's strong protections for an individual's private property. Once title is obtained in personal property, even if the camel (for

example) strays and is found by another, that other is no more than a trustee for the benefit of the true owner. Even a bona-fide purchaser cannot cut off the rights of the true owner. The inalienability of crediting the work to the creator of the work reflects a similar high regard for the rights of the owner of the work, or at least of the originator who is normally the first owner.

Egyptian copyright law includes fairly particular provisions regulating what in the United States is called "fair use". That is, there are a number of uses to which a copyrighted work may be put without violating the author's exclusive rights. [FN102] Performance of a work within a family, within the circle of a private group or club, or within a school is permitted provided admission is free. Performance of music by military bands or other state-associated music groups is permitted, again, as long as no admission is charged for the performance. Though perhaps generated originally out of general concern to protect uses which do not overtly affect the author's rights adversely and to permit uses which in general benefit the public, the scope of the non-infringing uses is a fruitful area for examination under Islamic law. (Sanhuri's *1098 general approach on the Civil Code of 1948 in which he tried to meld European law with shari'a principles appears reiterated in the copyright act).

The family exception is really a private-use exception and as such raises no significant concerns. Similarly, schools are allowed to use copyrighted works because the use furthers educational purposes, although a school is permitted the use of a work for purely entertainment purposes provided no admission is charged. The intent is clearly to permit use for educational purposes such as a classroom performance by aspiring actors. Whether we look to general conceptions of public welfare or shari'a-specific concepts, the idea that a work be available for education of others in a non- profit way reflects a sense of accommodating the welfare of the public as against a strictly enforceable property right by the copyright holder. A copyrighted work thus takes on some attributes of access-way easements and water rights under the Majalla insofar as a person may have title to some property, but the public, the community, or even other individuals may be able to claim servitudes.

The permission for use by a private club could be more problematic and less justified. The club is being viewed as a small association, like an extended family. A private dinner club or recreation club would not seem to have a solid ground to claim such a privilege. There seems no particular provision in the shari'a which would affect this right of use.

Permitting military bands or other state-associated music groups to perform music in public appears to be driven by some conception of the public good, such as the desire to make some performances available to that part of public which could not otherwise afford to attend concerts. The communal aspects of Islamic law seem foremost here.

Another limit on the author's copyright is what may be generally described as the scholar's exemption. [FN103] If someone is criticizing, analyzing, discussing, or explaining a work, that person is privileged to reproduce portions of the work appropriate to do the analysis or to present the work for instructional purposes. Brief passages of instructional, artistic, literary, historical, or scientific books may be reproduced. However, complete published news articles, scientific or other papers may not be reproduced in other newspapers or periodicals. This limit is closely tied to the public welfare as enhanced through scholarship and education.

Another very significant limitation on the copyright owner's right is the right of a person to make a reproduction of a single copy, for one's own personal use, of a published work, without regard to whether the *1099 person making the copy has any rights in the original work. [FN104] This provision carries consequences which are potentially devastating for some types of materials. For example, a person could borrow a book, magazine, or other written material from another or from a library, copy it, and then return the original. This ability may limit sales, but the limitation on the copy being for private use is probably enough of a safeguard. Similarly, copying a movie from video tape, or a song from CD or platter or tape onto one's own tape could affect sales, but the effect may be limited. However, if anyone can copy a computer program, even if the person has not purchased or licensed it, the market for that program could be destroyed. The breadth of this right to copy a published work for one's own personal use is open to criticism in the cases of music, movies, and especially software. Indeed, in the field of software, the legitimizing of such piracy could debilitate the market to such a degree as to make sales and development unattractive. In this instance, the intrusion on the owner's copyright property interest seems inconsistent with the traditional rights of property owners in the realms of real property and tangible personal property. Such free availability of the right to use privately owned property is not recognized under traditional Islamic law.

The copyright inheritance scheme is not in step with Islamic law of inheritance in a variety of ways. After the author's death, his or her heirs, as defined in the case of Egypt by Islamic law, shall be entitled to the pecuniary, exploitive rights granted by the statute. If there are no heirs, and the work was a collaborative one, then the statute creates a type of joint tenancy with rights of survivorship: the other collaborators get the descendant's share. This inheritance scheme involves significant variation from Islamic law under which there is no concept of joint tenancy, only tenancy in common. Another interesting variation from shari'a law is that in the case of collaborative works, that is works with more than one author, the copyright can be willed, without regard to the Islamic law limit of one-third of the estate being subject to devise with the balance being inherited according to Islam. [FN105] The moral rights of the author can be transferred by inheritance or by will under the same circumstances and subject to the same requirements and limitations as the publication and pecuniary rights. [FN106]

There are a number of very detailed rights regulating collaborations in settings such as production of a movie or television program. [FN107] In general, all collaborators must unanimously agree on *1100 disposition of a work, such as licensing for television before the work can be shown. If no such agreement is reached, the handling of the copyright can be imposed by a court.

One limit on copyrights of portraits is that the author cannot display, publish or circulate a portrait without the subject's consent, unless the portrait is of one who is of "world notoriety", or the public authorities authorize its publication as in the general interest. In any event, a portrait shall not be displayed if to do so would "result in prejudice to the honor, reputation or dignity of the person concerned." [FN108] This seems consistent with the historic desire in some sects in Islam to prohibit portraiture of any type as leading to idolatry.

The exploitive rights granted in the copyright, or any portion of them, may be assigned.

[FN109] On a related point, transfer of title to an original of the copyrighted work does not also transfer the copyright. [FN110] These provisions are consistent with Islamic recognition of the validity of splitting property interests and separating use from the title. However, the moral rights of claiming authorship and the like are personal and individual and may not be assigned. [FN111]

A general assignment of future works is void. [FN112] While such a bar is sound for policy reasons other than those in the shari'a, this bar against assignment of works which may never exist is completely consistent with, and probably compelled by, the shari'a doctrine of gharar.

Payment for the assignment may be in a lump sum payment or on the basis of royalties. [FN113] Royalties are not riba, or interest or usury, and the contract is not uncertain so this provision should withstand shari'a scrutiny. There is some potential for royalties to be deemed so uncertain as to be like gambling and thus prohibited. The analogy to selling fruit before it ripens, a prohibited act, is attractive. However, the reason for the rule against selling unripened fruit is that it is still subject to loss through drought, disease, or storm-it may never ripen. Here, the work exists, and only the ultimate value of it over time is unknown. The fruit has ripened and the ultimate market value of it is just an ordinary business risk. Thus analysis using giyas leads to the tentative conclusion that royalties ought not be prohibited.

The copyright law protects works of Egyptians and foreigners whose works are published for the first time in Egypt, works of *1101 Egyptians regardless of where the first publication takes place, and works of foreigners published in foreign countries, provided that work is copyrighted in that foreign country and the country provides similar copyright protection to Egyptian works. [FN114] Furthermore, Egypt is a signatory of the Bern- Convention on copyrights. The Islamic legal support for the sanctity of agreements, contracts, and treaties coupled with Quranic expressions of proper treatment of foreigners possibly compels this approach.

B. Egyptian Patent and Design Law

Like the Copyright Code, Egyptian patent law [FN115] is modeled on European law in general and the French code in particular. It complies with international standards and conceptions of patent protection and patentability- in exchange for public disclosure [FN116] of an novel, commercially exploitable idea or process, the state grants the inventor an exclusive right to work the invention. This right to exploit the invention is broad; it includes "by all means" for a period of fifteen years from the time of application for the patent with the potential right to a renewal term of five additional years if the fifteen year patent period was not adequate to grant the inventor an adequate return on his invention. [FN117] Patents are given for "any new invention industrially exploitable." The new invention can be of a "new industrial product", or a new method or process of manufacture, or a new application of a known method or process of manufacture. [FN118]

There are two significant exclusions from patentability of otherwise patentable inventions: no patent will be issued for "inventions contrary to law or morality," and no patent protection is available for chemical additives or substances used on or as food or medicine. [FN119] There is no guidance given from cases or regulations regarding what inventions will offend public

morality or public policy. [FN120] One wonders whether a new process for making alcohol would not be patentable under this provision. Significantly, although the chemical substance, food, or drug cannot itself be patented, the process of making the chemical may be patented.

*1102 The statute provides little affirmative guidance as to what amount of novelty is required. [FN121] However, it does provide a negative definition of what is not novel by describing several instances in which the invention will not be patentable. First, and most generally, if a description and specification of the invention are "publicly known in Egypt and are sufficiently clear so as to enable experienced persons to work the invention," no patent will be issued. Second, if the "invention was used publicly in Egypt within a period of fifty years" prior to the application for a patent, then the invention is not novel. Third, if the invention had already been patented or an application for a patent for the similar item was made by someone other than the new applicant within the preceding fifty years, no patent will be issued. [FN122]

Michael H. Davies notes that the statute does not deal with the "question of fraudulent publicity or the granting of a patent where fraud is involved, and there appears to be no jurisprudence on the subject." [FN123] Davies then looks to European law, rather than shari'a, for guidance and concludes that, in at least France and Germany, novelty would not be destroyed. The same result should arise under Islamic law. The Islamic focus on bringing forth the good and hindering the bad, the focus on proper conduct, the protection given to true owners of lost chattel to the extent of imposing affirmative trustee-like duties on finders, and the fruit-of-the-poisonous-tree approach which limits the rights of bona-fide purchasers who take from thieves and even those in rightful possession, all lead to the conclusion that one ought not lose a right to a patent because of another's wrongdoing. The shari'a should lead to the result favoring the true owner of a property right.

The respect and status given to treaties and to foreigners in general (in many respects, though not in all, for instance, rights of inheritance from a Muslim) under Islamic law are reflected in the Patent Act. Essentially anyone who is doing business in Egypt, is residing in Egypt, is an Egyptian national, or is from a country which grants reciprocal treatment to Egyptian nationals is a proper patent holder. The patent law lists five classes of persons entitled to hold patents:

- (1) Egyptians;
- (2) Foreign residents of Egypt and persons possessing industrial or commercial establishments in Egypt;
- (3) Foreign nationals and domiciliary residents from countries which grant reciprocal treatment to Egyptians;
- *1103 (4) Legal entities, such as companies or institutions, which are established either in Egypt or in foreign countries which grant reciprocal treatment to Egyptian nationals; and
- (5) Public administrations or agencies. [FN124]

The owner of the patent depends upon the number of inventors and the employment status of

the inventor. If there are two inventors who jointly seek a patent, then they will jointly own equal shares in the patent as tenants in common, without right of survivorship (Islamic law does not have joint tenancy with right of survivorship). [FN125] However, if two or more inventors did not jointly claim title, but filed individual claims, then the statute is a pure race statute. It matters not who invented it first, but rather who applied for the patent first.

If an invention is made by an employee within the scope of his or her employment duties, or is made by an employee during employment hours of service, then the patent belongs to the employer. Similarly, if the invention is made by a person employed under a contract of service, an independent contractor rather than an employee, the employer again gets title. However, the inventor gets recognition as the inventor and may be entitled to extra compensation for the invention. [FN126] Even if the employee makes the invention on his own time, at home, the employer has the option to work the invention or to purchase the patent rights from the employee for an equitable consideration. The employer must exercise this option within three months of notification of the grant of the patent. [FN127] The same rules apply if the patent application is made within a year of leaving employment. [FN128]

These provisions reflect aspects of shari'a labor relations law under which an employer is to pay an employee "before sweat from the labor is dry"; is to pay an employee a fair wage; and is encouraged to include employees in participation in the success of the business through capital or other means. [FN129]

One significant limit on patent rights is that if, before the application was made, another has commercially exploited the *104 invention, or made preparations to do so, that person may continue to use the invention without infringing the patent holder's rights, but that person may not assign or transfer those rights to another. [FN130] Though this provision is not explicitly required under Islamic law, one cannot help but hear echoes of the limitations on ownership rights which require an owner not to abuse his rights and not to use his property in such a way as to harm another. Fundamental fairness dictates that a person who developed an idea independently, before a patent is granted on the idea, be allowed to continue to exploit the idea even though he did not patent the concept.

Unlike copyrights, which pass to heirs, patents pass to the decedent's legal representatives. [FN131] This provision contravenes traditional Islamic law of inheritance of property. However, the relationship of these provisions to shari'a law of inheritance is torturously complex and is beyond the scope of this article except to note that in both cases these forms of intellectual property are treated specially within the whole of the estate of the decedent at least to the extent that the statutes affect the ordinary scheme of inheritance by identifying proper devisees or heirs.

Patents can be assigned or pledged either with or without compensation. [FN132] Any interest or part of any patent may be assigned or pledged, including the right to use for a period of time, under certain conditions, or for certain products only. [FN133] This divisibility is consonant with Islamic property law.

The public interest in patents is such that under some circumstances the patent holder may be compelled to license the invention to another. [FN134] If a patent holder does not work the

patent within three years in Egypt, or if he interrupts use of the patent for two or more consecutive years, the patent office may license the invention to anyone who wants to exploit it if the potential licensee meets certain conditions. Those conditions include showing that the patent holder either refused to grant a license or made "exorbitant conditions" for the use and that the potential licensee can "adequately work the invention." If the license is issued, then the licensee must still pay the patent holder reasonable compensation for the use. An even more interesting ground for compulsory licensing is the grant of a license whenever a patent holder is "unable to work the patent on a reasonable *1105 commercial scale to cope with the needs of the country" [FN135] This is in keeping with the patent scheme of furthering inventions, but using them for the public good.

The compulsory license fits well the Quranic injunctions to share one's wealth with the poor or more broadly considered, to undertake acts for the common good. [FN136] "And the likeness of those who spend their wealth in search of Allah's pleasure, and for the strengthening of their souls, is as the likeness of a garden on a height. The rainstorm smiteth it and it bringeth forth its fruit twofold. And if the rainstorm smite it not, then the shower." [FN137]

A similar compulsory licensing scheme exists where the owner of one invention can only use it in connection with another's patent. The statute provides that the dependent party is entitled to a license from the dominant party, again on reasonable conditions, such as cross licensing.

A troublesome right, at least in regard to international patents and trade, is the right of the government to expropriate "all rights in an invention for reasons relating to Public Utility or National Defense." The expropriation may be limited, or complete. In either event, the patent holder is entitled to just compensation. [FN138]

Egypt also recognizes design patents for terms of five years, with two renewal periods of five years each. [FN139] The patent law also contains a number of special provisions for international patents. Key among them is a provision that a patent in a foreign country is given priority in Egypt, if the inventor seeks patent protection in Egypt within one year of application for the patent in the foreign country. This operates as an exception to the pure race nature of the act for determining priority. [FN140] Egypt has signed the Paris Convention on patents. Any interested party may request application of international agreements and conventions adhered to by Egypt in place of the patent law, when those international agreements provide more favorable terms. [FN141] This deference to foreign patents is consonant with the shari'a requirement that contracts, agreements, and especially treaties be honored.

*1106 CONCLUSION

As demonstrated above, legal protection of intellectual property is fully consonant with shari'a law. To the extent the protections are contractually based, the sacred trust and bond accorded an agreement under Islamic law should protect the contracting party. To the extent the protections are premised on concepts of ownership of property, the shari'a solicitude for owners of property should protect the owner. To the extent the protections are based upon statutes duly enacted by the government, the recognition of the legitimacy of governmental legislation within Islam should protect the person claiming under it.

Certain limitations on intellectual property rights have been enacted in Egypt. The limitations on future assignments and compulsory licensing comport with shari'a concepts. Limitations of the time of exclusive exploitation rights reflect a derogation of traditional strict property rights held by owners of realty and tangible personal property, but reflect an appropriate accommodation of the individual's exploitation rights and society's desire to have knowledge freely available to all. Some areas may require full exploration such as the relationship between the use of royalty systems and gharar, but these concerns do not appear to be insurmountable hurdles to effective protection of intellectual property consistent with Islamic law. If shari'a principles become fully ascendant, certain relatively peripheral aspects of the law could be changed such as the inheritance or devise structures and perhaps the balance currently struck concerning right of a person to make a copy of any copyrighted work for his or her own use would be restruck in favor of greater protection of the property interest held by the creator or owner of the copyright.

Regardless of whether Islamic law moves in the direction of modern reformist theoreticians or toward more fundamentalist traditionalists, there is no compelling reason to anticipate dramatic enhancement or reduction in the protections of intellectual property based solely on the desire to make them fit within the shari'a. Other political concerns may result in sweeping changes or a particular zealot's view of the proper interpretation of the Quran and the shari'a could result in dramatic changes, but such changes are not compelled by either traditional or modern understanding of the shari'a.

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FN[FN1]. Many other issues important to decisions to invest in or to transfer intellectual property to other countries such as the perceived fairness and reliability of the domestic court system, political stability, procedural protections, economic climate and the like are not considered in this article.

FN[FN2]. See generally Robert M. Sherwood, Intellectual Property and Economic Development (1990).

FN[FN3]. See Caryle Murphy, Islam: Politics and Piety, Wash. Post, Apr. 26, 1992, at A1, A28-A29, Apr. 27, 1992, at A1, A13-A14, Apr. 28, 1992, at A1, A18- A19. In the last two decades the fundamentalist movements have gained ground throughout the Muslim community. Id. See also Kristan L. Peters Hamlin, Note, The Impact of Islamic Revivalism on Contract and Usury Law in Iran, Saudi Arabia and Egypt, 22 Tex. Int'l L.J. 351 (1987).

FN[FN4]. Egypt Const. art. 2.

FN[FN5]. The term "shari'a" may be used either broadly to refer to all law based on Islam or narrowly to refer to the binding set of rules governing Muslims. See Ahmed Zaki

Yamani, The Eternal Shari'a, 12 N.Y.U.J. Int'l L. & Pol. 205, 205-06 (1979). In this article, the term is generally used in its more technical, narrow sense.

FN[FN6]. Michael H. Davies, Introduction to the Legal System of Egypt, in Commercial Laws of the Middle East 9-15 (Allen P.K. Keesee ed., 1981).

FN[FN7]. The first codification in modern times was Majalla, the 1869 codification of Islamic Law for the Ottoman Empire. Noel J. Coulson, A History of Islamic Law 151 (1964). Earlier works are more in the nature of commentaries or opinions than codifications. See, e.g., Imam Malikibn Anas Al-Muwatta of Imam Malik ibn Anas: The First Formulation of Islamic Law (Aisha Abdurrahman Bewley trans., 1989). See ash Shafi'i in The Risala. See also Coulson, supra at 59, 76-79.

FN[FN8]. The theory appears to be that all of the jurists of a particular time are so unlikely to agree on anything that when they do, we can be relatively confident that the agreement was divinely inspired.

FN[FN9]. Nabil Saleh, The Law Governing Contracts in Arabia, 38 Int'l & Comp. L.Q. 761, 781 (1989); Gamal M. Badr, Islamic Law: Its Reaction to Other Legal Systems, 26 Am.J.Comp.L. 187, 189 (1978).

FN[FN10]. Quran, II:43, 149.

FN[FN11]. Id. II:180.

FN[FN12]. Id. II:219.

FN[FN13]. Id. V:3.

FN[FN14]. Id. II:198, 275.

FN[FN15]. Id. II:185.

FN[FN16]. Id. V:1.

FN[FN17]. James N.D. Anderson & Noel J. Coulson, The Moslem Ruler and Contractual Obligations, 33 N.Y.U.L.Rev. 917, 929-31 (1958).

FN[FN18]. Coulson, supra note 7, at ch. 9.

FN[FN19]. Id.; See also Michael H. Davies, Business Law in Egypt ch. 2 (1984).

FN[FN20]. Coulson, supra note 7, at chs. 2, 5 & 9.

FN[FN21]. Id. at ch. 11; Davies, supra note 6, at 9-15. The Egyptian law was heavily based on the French Civil Code, but the principle drafter of the Egyptian Code, Abdel

Razeq Al Sanhuri, included a great deal of shari'a principles in the law. See Sanhuri's Explanatory Memorandum issued with the Code. A more detailed discussion of this phenomenon is far beyond the scope of this article. Liberalizing reforms have been enacted in many states with respect to personal status issues, but the counter-movement to reduce the prominence of European influence in all facets of law in some states, such as Iran, is strong. See Coulson, supra note 7, at chs. 13 & 14; James N.D. Anderson, Islamic Law in the Modern World ch. 5 (1959); Peters Hamlin, supra note 3.

FN[FN22]. Quran, VII:128 (All verbatim quotations are from the translation of the Quran by Mohammed Marmaduke Pickthall in Mohammed Marmaduke Pickthall, The Meaning of the Glorious Koran (Mentor Books 1953).).

FN[FN23]. C.G. Weeramantry, Islamic Jurisprudence: An International Perspective 61-62 (1988); Saba Habachy, Property, Right and Contract in Muslim Law, 62 Colum.L.Rev. 450, 452 (1962).

FN[FN24]. Habachy, supra note 23, at 456.

FN[FN25]. Id. at 454.

FN[FN26]. Quran, II:188.

FN[FN27]. Joseph Schacht, An Introduction to Islamic Law 37 (1964); David F. Forte, Lost, Strayed, or Stolen: Chattel Recovery in Islamic Law, in Islamic Law and Jurisprudence 97, 103 (Nicholas Heer ed., 1990).

FN[FN28]. Forte, supra note 27, at 105.

FN[FN29]. Id.

FN[FN30]. Farhat J. Ziadeh, Property Law in the Arab World 36-38 (1979).

FN[FN31]. Majalla art. 1253. (The version I used was: The Mejelle (C.R. Tyser et. al. D.G. Demetriades, Ismail Haqqi Effendi trans., 1967).). Hereafter, Majalla will be referred to by its more common spelling, "Majalla", rather than "Mejelle", and citations will be to the Code and articles without reference to the particular translation used.

FN[FN32]. Id. art. 1252.

FN[FN33]. Id. arts. 1247, 1297.

FN[FN34]. As may be expected, there are detailed rules regarding ownership and other rights in water. In general, water is jointly owned by everyone, though under many circumstances one may acquire separate title to water by possession. See, e.g., id. arts. 2164 - 2169; 1281 - 1291.

FN[FN35]. Ziadeh, supra note 30, at 61-62.

FN[FN36]. Majalla art. 534.

FN[FN37]. For this point I am indebted to Prof. David F. Forte, Cleveland- Marshall School of Law, who read and made a number of helpful observations about this article.

FN[FN38]. 2 The Hedaya 92 (1795).

FN[FN39]. Though one cannot ignore such pronouncements of ancient scholars, they are not necessarily within the ambit of the underlying roots of the shari'a as that term is used in this article. In fact, I have been unable to find similar references in any of the other classic Islamic works which have been translated, I could not find any other reference to this point in any of the English or French Islamicists, and I do not read Arabic.

FN[FN40]. Quran, V:1.

FN[FN41]. See, e.g., Anderson & Coulson, supra note 17, at 923; Habachy, supra note 23, at 458-60; Noor Mohammed, Principles of Islamic Contract Law, 6 J.L. & Religion 115 (1989).

FN[FN42]. Habachy, supra note 23, at 459; Anderson & Coulson, supra note 17, at 925.

FN[FN43]. Anderson & Coulson, supra note 17, at 923-28; Habachy, supra note 23, at 463.

FN[FN44]. Habachy, supra note 23, at 467. According to an articlein the Washington Post, at least 14 U.S. companies claim to be owed a total of \$450 million by the Saudi Arabia government or nationals for work done in Saudi Arabia. David Ignatius, Some Saudis Won't Pay, U.S. Contractors Complain, Wash. Post, May 14, 1992, at A1, A18. To put this amount in context, in 1991 alone, total U.S. trade was \$18 billion. Saudi Arabia has about 40,000 commercial transactions each year, and about 500,000 since 1980, the same period in which these claims arose. Saudis have a list of 15 cases in which Saudis are making claims against U.S. companies. Furthermore, the contracts all provide for dispute resolution within a special Saudi arbitration board and not all U.S. nationals submit the disputes to the board. In general, the article does show compliance with contract terms. In any significant volume of transactions there will be a number of problematic ones and some in which one side or the other is not honoring commitments.

FN[FN44]. Quran, IX:1.

FN[FN46]. Id. IX:4.

FN[FN47]. Anderson & Coulson, supra note 17, at 929.

FN[FN48]. Saleh, supra note 9, at 765-77.

FN[FN49]. Strictly speaking only the Hanbali school expressly goes so far as to state that all contracts not forbidden are permitted, but in practice freedom of contract is very broad. Anderson & Coulson, supra note 17, at 922.

FN[FN50]. Aramco Arbitration 55-59; Habachy, supra note 23, at 469-70.

FN[FN51]. Majalla art. 45.

FN[FN52]. Id. art. 44.

FN[FN53]. Id. art. 39.

FN[FN54]. Aramco Arbitration 55-59.

FN[FN55]. Saba Habachy, Seminar in Near and Middle Eastern Legal Institutions 132 (1964) (Parker School of Foreign and Comparative Law, Columbia University, N.Y.) quoting Quran, IX:71.

FN[FN56]. Majid Khadduri, The Maslaha (Public Interest) and 'Illa (Cause) in Islamic Law, 12 N.Y.U.J. Int'l L. & Pol. 213, 214 (1979); Quran, III:115; V:4, 5.

FN[FN57]. Majalla art. 17.

FN[FN58]. Id. art. 22.

FN[FN59]. Mohammed, supra note 41, at 117-20.

FN[FN60]. However, Pakistan and Iran have experimented with "Islamic banking" under which no interest is charged and under which banks take equity positions instead. Furthermore, the resurgent fundamentalist movement often is at odds with the reformist approach of many of the governments in Islamic countries. The pushes and pulls are ongoing and the ultimate result is far from clear. See Caryle Murphy, Islam: Politics and Piety, Wash. Post, Apr. 26, 1992, at A1, A28-A29, Apr. 27, 1992, at A1, A13-A14, Apr. 28, 1992, at A1, A18-A19. See also Peters Hamlin, supra note 3.

FN[FN61]. Quran, II:219; V:93, 94.

FN[FN62]. Mohammed, supra note 41, at 121.

FN[FN63]. Id. (quoting Ali Yusuf Ali, The Holy Quran at 86, fn. 241 (1946)).

FN[FN64]. Id. at 123.

FN[FN65]. Id.

FN[FN66]. Nabil A. Saleh, Unlawful Gain & Legitimate Profit in Islamic Law 49 (1986).

FN[FN67]. See Weeramantry, supra note 23, at ch. 5 for a general discussion and listing of 30 "notions" or "basic Islamic legal ideas" which form a hodge- podge of what may be termed public policy, ideals, goals, and principles underlying and exemplifying various aspects of Islamic law's approach to public policy. Not all 30 will be discussed here.

FN[FN68]. For a discussion of this issue in the U.S. property law and constitutional law context see Laura Underkuffler, On Property: An Essay, 100 Yale L.J. 127 (1990).

FN[FN69]. Quran, IX:71; Yamani, supra note 5, at 208; Mohammed, supra note 41, at 116.

FN[FN70]. Yamani, supra note 5, at 209; Khadduri, supra note 56, at 213, 214.

FN[FN71]. Yamani, supra note 5, at 210.

FN[FN72]. Saleh, supra note 9, at 777-81.

FN[FN73]. Id.

FN[FN74]. Weeramantry, supra note 23, at 72; Anis Al-Qasem, Note, The Unlawful Exercise of Rights in the Civil Codes of the Arab Countries of the Middle-East, 39 Int'l & Comp. L.Q. 396, 397 (1990).

FN[FN75]. 1 Majid Khadduri and Herbert J. Liebesny, Law in the Middle East 186-87 (1955).

FN[FN76]. Al-Qasem, supra note 74, at 397.

FN[FN77]. Majalla art. 91.

FN[FN78]. Id. arts. 1197-1217.

FN[FN79]. Egyptian Civil Code of 1948 art. 4.

FN[FN80]. Id. art. 5.

FN[FN81]. E.g., Quran, II:270-273; VIII:73. See also Weeramantry, supra note 23, at 59-60.

FN[FN82]. Majalla art. 17.

FN[FN83]. Id. art. 26.

FN[FN84]. Id. arts. 27-29.

FN[FN85]. Id. art. 30.

FN[FN86]. But see discussion at supra part B.

FN[FN87]. See supra pp. 1083-86.

FN[FN88]. See supra pp. 1084-85.

FN[FN89]. Consideration of the potential problems of licensing intellectual property because of the doctrine of gharar is beyond the scope of this article. The matter is raised here and some of the major concerns noted because licensing is so commonly tied to the intellectual property transactions.

FN[FN90]. See supra p. 1085.

FN[FN91]. See supra p. 1089-90.

FN[FN92]. See supra pp. 1086-89.

FN[FN93]. Law No. 354, June 24, 1954 as amended by Law No. 34, June 17, 1975.

FN[FN94]. Id. art. 1.

FN[FN95]. Id. art. 2.

FN[FN96]. Id. art. 4.

FN[FN97]. Id. art. 5.

FN[FN98]. Id. art. 6.

FN[FN99]. Id. art. 8.

FN[FN100]. Id. art. 20.

FN[FN101]. Id. art. 9.

FN[FN102]. Id. arts. 11-17.

FN[FN103]. Id. art. 17.

FN[FN104]. Id. art. 12.

FN[FN105]. Id. art. 18.

FN[FN106]. Id. art. 19.

FN[FN107]. Id. ch. II.

FN[FN108]. Id. art. 36.

FN[FN109]. Id. art. 37.

FN[FN110]. Id. art. 41.

FN[FN111]. Id. art. 38.

FN[FN112]. Id. art. 40.

FN[FN113]. Id. art. 39.

FN[FN114]. Id. art. 49.

FN[FN115]. Act No. 132 (1949) [hereinafter Act. No. 132].

FN[FN116]. Id. art. 16.

FN[FN117]. Id. arts. 1, 10, 12, 16.

FN[FN118]. Id. art. 1.

FN[FN119]. Id. art. 2.

FN[FN120]. Davies, supra note 19, at 229.

FN[FN121]. Act No. 132, supra note 115, at art. 3.

FN[FN122]. See Davies, supra note 19, at 228-29 for a more complete consideration of the problem of novelty.

FN[FN123]. Id. at 228.

FN[FN124]. Act No. 132, supra note 115, at art 5.

FN[FN125]. Id. art. 6.

FN[FN126]. Id. art. 7. The law regarding the status of the employee and the employer with respect to the invention is somewhat more complex because it also involves Article 688 of the Civil Code of 1949 which has somewhat different language. A full discussion of the problem may be found in Davies, supra note 19, at 234-36. The description in the text proper is adequate for the aims of this article.

FN[FN127]. Act No. 132, supra note 115, at art. 8.

FN[FN128]. Id. art. 9.

FN[FN129]. Weeramantry, supra note 23, at 63.

FN[FN130]. Act No. 132, supra note 115, at art. 11.

FN[FN131]. Id. art. 28.

FN[FN132]. Id.

FN[FN133]. Id.

FN[FN134]. Id. art. 30.

FN[FN135]. Id.

FN[FN136]. Quran, II:263-77; VIII:73. Weeramantry, supra note 23, at 59-60.

FN[FN137]. Quran, II:265.

FN[FN138]. Act No. 132, supra note 115, at art. 33.

FN[FN139]. Id. arts. 37, 44.

FN[FN140]. Id. art. 53.

FN[FN141]. Id. art. 58.