# @ Mark: A Flexible Copyright System (FleCS) Proposal

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# Abstract

Ever since it emerged several centuries ago as an accompaniment to the act of publication, the copyright system has been expanding in scope in line with the development of new media, including cinematography and television as well as photocopiers and computer systems, and remains alive today. But digitization and the rapid growth of the Internet since the 1990s have shaken the foundation of this venerable system.

To respond to the challenge, two opposing solutions have been proposed. The first calls for bolstering the current system by remedying its deficiencies. The second, by contrast, is to evolve the system into a flexible one that can cover the fluctuations that are regarded as given. The first solution is designed for an expansion of vested interests and stricter enforcement, while the second targets an extension of the public domain. But both solutions share one perspective: simply maintaining the status quo will not solve the problem.

This paper describes a thought experiment for devising a flexible copyright system suited to the digital age through a process of "creative destruction" in line with the second solution noted above. It proposes a "Flexible Copyright System" (FleCS) with the co-existence of a number of subsystems, in which the duration of rights for content available on the Internet is limited to 15 years at most and which focuses on the right of name indication.

#### 1. Digitization and the Copyright System

In place since the time Gutenberg invented the printing system, the modern copyright system has rested on the implicit assumptions that (1) the fruits of creation are "embodied" in tangible goods, that (2) duplication is inevitably subject to a deterioration in quality, and accompanied by cost, time and that (3) duplication through transmission is either impossible due to quality deterioration or is too costly or time-consuming.

But digital technologies have created a situation in which (1) the creation can be exchanged in a

digital format without conversion into tangible goods, in which (2) duplication can be made instantly, without cost and free from any deterioration and in which (3) transmission makes no alteration to the conditions of the creation. This has enabled systems for distribution of works in the form of peer-to-peer exchange, such as Napster and Gnutella. Hence, the change that has arrived with digital technologies has the potential to totally reverse the dynamics described above (Hayashi [2001b]).

But in fact, technologies are open to everybody. That means that copyright holders can also use the technologies that users use and that they can use the same systems to strengthen their copyright. With technology, several copyright control systems can be produced, including one that allows only one replication, another that blocks duplication on any different medium and still another that limitlessly traces the duplication history. Moreover, some people see technology as eventually moving in favor of copyright holders, who tend to have more financial clout, because system development requires an enormous capital investment (Lessig [1999]). History may well teach the lesson that right holders have great influence unless the silent majority makes some demonstration of their views and takes some kind of action.

The current copyright system has been developed in circumstances and history of the Japanese law system. Assuming that the principle of survival of the fittest is functioning properly, it is possible to assume that it has produced a nearly optimal situation. On the other hand, with dramatic technical innovation it is also possible to understand that the system has lost its adaptability with its own "excessive inertia" kept intact and that it is barely maintained by the strong support of vested right holders.

Originally belonging to the school of continental law, Japan adopts a principle in which "Bukken" (property rights in Japanese legal context, hereinafter simply "property rights") can only be established by statute as in Article 175 of the Civil Code. Some say that the interpretation of the Copyright Law governs everything to do with copyright, which is among the property rights. But in reality, as seen in shrink wrap, the law of contract, complements or even overrides the copyright law. We have to adjust Copyright Law to the reality, not vice versa.

In this respect, Calabresi & Memaled [1972] is helpful, although their views are based on a different principle of American law. They scrutinized the balance of the "property rule" for the establishment of property rights, the "liability rule" for posterior relief from damages (and/or offences), and "inalienability," in a different category from those of proprietary nature, which together constitute the current grand "cathedral" of law.

To translate this into a continental law system, it can be understood as a question of positioning the three factors of "property rights," "contractual rights" and "human rights." The three factors provide us with a basic perspective for the construction of a copyright system. Influenced by what we have seen until today, we tend to simplistically think that copyright is not a moral right, but a property right. However it is effective to return to the starting point to think freely given a situation in which all systems face the challenge of the diffusion of digital technologies.

### 2. Drawbacks of the Current Copyright System

Notwithstanding its long history, the current copyright system has the problems discussed below. All that digitization has done is to provide an opportunity for these problems to be highlighted.

(1) "Bukken" versus "Saiken"

The present Japanese law system has adopted the dichotomy between "bukken" (property rights) and "saiken" (contractual rights). The law has been applied with the contrastive differences shown in Figure 1 between the two types of rights.

#### Figure 1 Differences between Bukken and Saiken

	Bukken ( Property rights )	Saiken (Contractual rights)	
Statutory	Only those restrictively listed in the	Those stipulated in the statute are	
Status	statute can be recognized as property	nothing but examples and do not restrict	
	rights.	any contracts.	
Claimability	Against any parties if predefined	Against parties concerned only and	
	requirements are met.	against no third parties	

As is seen from Figure 1, property rights are exclusive rights of proprietors based on which claimability against third parties is possible, for instance, for injunction against acts that infringe copyright or for restoration to an original state. On the other hand, contractual rights have binding force over the parties concerned. Against the acts of third parties, it is possible to claim damages afterwards, but it is normally impossible to request an injunction. Such posterior relief measures cannot affect any bona fide third party.

Given these circumstances, it was not surprising that rights for inventions, discoveries and artistic creations were protected as near-property rights, not as contractual rights, in the 19th century. And given that the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works were signed in 1883 and in 1886 respectively, it was supposedly almost unthinkable to make a treaty from the perspective of contractual rights.

But it is fundamentally unreasonable to treat copyright as a property right. It is simply a fiction to treat that which is not tangible, which can be duplicated and the original of which can be retained after duplication (in other words, which cannot be exclusively owned) in the framework of property rights.

## (2) Grant of rights or restriction of acts?

There are three types of protection of ideas and works: (a) grant of certain rights, (b) special

prohibition of acts that are prejudicial to the protected interests and (c) a general prohibition of such acts. A suggestion of inventors' or authors' rights is stronger in (a) than in (b), and in (b) than in (c), as seen in Figure 2.

From a logical perspective, this implies that compensation for loss could protect creators' rights from infringement even if it were not protected by the copyright law. But this approach normally hinders injunction and leads to great difficulty in supporting the amount of losses. As this cluster of rights is widely recognized in society, acts of unfair competition such as imitation start to be prohibited. That raises the significance of works as information goods as it allows creators virtually exclusive use of their creation. In this situation, not only claims for losses but also injunctions against unlawful acts are available to authors.

When this right has been strengthened and positioned as close to ownership, it has evolved into the intellectual property right we know today, which some people call "intellectual ownership" for the reason described above. This approach has paved the way not merely for the right to claim abatement of nuisance, injunction, or damages, but for transfer, succession, licensing, claimability with respect to third parties as well.

The above discussion is a review of the three principles as purely theoretical frameworks. In actual history since the modern times, events occurred in inverse order: the grant of rights was first introduced and was then followed by a restriction of acts, special or general. In fact, business patents were granted along with the development of printing technologies. Later, copyright diverged from them.

More than three centuries following the introduction of the system, it is not necessarily indispensable to adopt a structure close to that of ownership if it is possible to redesign the system from scratch. The grant of rights is too advantageous to right holders in view of the peculiarities of information, including non-exclusiveness of consumption and infinite duplicability.

Approach	Description	Existing laws	Effect	
Grant of rights	Grant of rights to	Patent Law,	Abatement of nuisance,	
(Property rule)	creators	Copyright Law, etc.	injunction, claim for damages, transfer, succession, licensing, secured transactions, claimability to third parties, etc.	
Restriction of specific acts (Specified conduct prevention rule)	Prohibition of acts prejudicial to business interests in unfair competition	Unfair Competition Prevention Law	Claim on injunction and for damages (with provision for estimation of damages)	

Figure 2 Protection of intellectual properties

General	Prohibition of acts	Civil Code	Limited to claim for damages
restriction of acts	prejudicial to		
(Liability rule)	creators' interests		
	with intention or by		
	negligence		

#### (3) Patent or copyright?

Worse, the two major intellectual property rights, namely patent and copyright, derive from the dichotomy between the protection of ideas and the protection of expression. The two conventions mentioned above treated the fruit of intellectual production in contrasting manners. The system of industrial property rights, among which patent is a notable example, recognizes the absolute exclusive rights for a certain period, which is 20 years in Japan, to protect technical invention (ideas) and allows patent holders to license others with a view towards achieving a wider application of invented ideas.

On the other hand, the copyright system emphasizes protection of expression in literary or artistic works, or the right of duplication. With a great economic impact, "copyright" serves to protect individual rights during the protection period, which normally lasts 50 years after the death of the author. In consequence, copyright protects expression whereas patent protects ideas. There is a significant gap between them in the length of the protection period.

This complicates the handling of intellectual properties positioned in between. Disputes over the kind of rights (patent or copyright or both) for programs as intellectual production are a typical example.

#### (4) Author's right or duplication right?

What makes matters worse surrounding copyright is that it contains two aspects of "moral rights" and "property rights." The first refers to the rights, for example, which ensure that I will be recognized as the authentic author of this paper and be free from unfavorable treatment such as defamation. In contrast to this, the second right refers to the asset rights that, for instance, allow publication of my paper in this way or licensing for duplication afterwards.

This dichotomy is in fact an old and new question that stems from the history of establishment of copyright. Even today, there is still a clash between the moral-oriented school of continental law and the property-oriented stream of Anglo-American law. Since this right has been developed with printing technologies, there are publishers at the heart of property rights. Copyright is literally a right to copy. This is a term based on the second concept.

The moral rights alone include three divisional rights; the "right of making the work public," the "right of determining the indication of the author's name" and the "right of preserving the integrity." Moreover, though based on the "right of reproduction," property rights are literally a bundle of miscellaneous rights including the "right of exhibition" and the "right of communication to the

public." There have been few attempts to intentionally differentiate moral rights as part of human rights from property rights, except where they are discussed in relation to an infringement of a specified divisional right. On the contrary, there has been an argument that the two aspects are inseparable.

## (5) Protection of creations (messages) or protection of agents (media)?

Copyright protects creative expressions, which are messages expressed in some form. However, such messages are conveyed via some kind of media. When these media have some scarcity value, protection of the media may indirectly protect the work.

This framework justifies the protection of the rights of non-performers, such as record manufacturers and broadcasters (including cable broadcasters), protected as "neighboring rights." But vested rights are such that right holders start to make their best possible efforts to expand them once they are recognized. Typical examples include the efforts of Hollywood and those of broadcasters that finally won the recognition of the "right to make the work transmittable."

On the other hand, we no longer live in a world in which distribution of creations was solely dependent on media such as records or broadcasting facilities. The Internet allows anyone to be a creator and a distributor (or a medium). Vested right holders appear to be floundering in a situation where their position is in jeopardy when they attach weight to their rights.

There are two key points here. The first is that the copyright law, which originates from a "publication law" as an industrial or media law, must inevitably be changed when the media are changed. The other is that what is important is not the media but messages.

## 3. Protection of Tangible Goods and Application to Intangible Goods

Copyright protects "creative expressions of thoughts or sentiments." Defined as a requirement for limited types of works, embodiment, or fixation in particular, is not a general requirement. Even something that instantly disappears, such as an improvisatory musical performance, is protected as musical work, as far as it is creative. What is more, the property right on "goods" on which information is fixed is one thing while copyright on "information goods" embodied in it is another, though this tends to be misunderstood by the public. For instance, I can enjoy viewing a painting by a famous artist that I have bought or showing it others, but I cannot publish it if the right of publication, as part of the copyright, had been transferred to a third party before I concluded my purchase contract.

Generally speaking, embodiment and fixation are valid as a means of making it easier to secure protection for intangible goods, since identification is essential to any recognition of rights. In the case involving improvisatory musical performance described above, it will be extremely difficult to assert the rights at trial even though the rights on it do exist. It is therefore not surprising that the current legal system is mainly designed for tangible goods.

The basis of the civil law system centered on tangible goods has remained almost unchanged though they have been slightly adjusted to the change in society. Symbolically, Article 85 of the Civil Code reads that "goods" in this law refer only to tangible goods.

And it has sound legal grounds. Tangible goods can be "possessed for the purpose of controlling them exclusively." The absolutely exclusive rights of holders are legally recognized as "property rights" based on this "exclusive possession." "Claimability" such as registry and handover have been established as a mechanism to reserve rights with respect to the general public, including third parties. In contrast, "information goods" are intangible and cannot be identified even by authors using their hands. It is extremely difficult to ensure that others never use them. In addition, if one transfers "information goods" to others, one still has the identical goods on hand. In legal terms, the state of "exclusive possession" is blurred and there is no clear-cut transfer.

Indeed there are some regulations that produce an effect close to "protection of information" in practice, although they are not explicitly designed to do that. For example, the provisions on "tort" in the Civil Code recognize the liability for "non-asset damages" arising from "harm to bodies, freedom or honor of others." Thus, protection from "non-asset damages" such as defamation is secured.

Notwithstanding that, it is clear that the prior grant of rights for elimination of the use or interference by others (a "property rule" in American law) produces stronger protection than posterior relief for damages caused by tort (a "liability rule" in American law). The intellectual property system is a typical example of the first approach. In between, there is another approach (a "specified conduct prevention rule") that specially bans acts that are harmful to the interested to be protected. The three methods differ in the strength of rights: stronger in a "grant of rights" than in a "specified conduct prevention rule" and stronger in a "specified conduct prevention rule" than in a "liability rule." (See Figure 2 shown above)

It must be noted that the strength of protection varies depending on the type of creation, although intangible goods can be more strongly protected when they are embodied in tangible goods. An earlier part of this paper mentioned that the development of digital technologies and the expansion of networking have alleviated or completely eliminated the three difficulties in (1) embodiment, (2) duplication and (3) transmission. Among them, the difficulty in transmission is likely to be interrelated with that in embodiment or fixation. It will be effective to introduce a classification of copyrighted creations on two axes of difficulty in embodiment and difficulty in duplication.

Figure 3 is an attempt at such classification. Notable examples of works that are "hard to embody and hard to duplicate," which are positioned close to the origin of the map include publication in the initial stages and traditional sculpture. At the other extreme is what we may call "digital goods," which are "so easy to embody, so easy to duplicate" that they pose a question that cannot be answered with the conventional concept of copyright.

In the middle of the two extremes, there are other works that are "easy to embody but difficult to reproduce", such as performance. In the past, performance was hard to embody but the development of digital recording devices has facilitated the embodiment. But it is somewhat doubtful whether a performance embodied in this way carries the same value as the performance itself, because it does not carry its "aura," at least according to Walter Benjamin. In this respect, there seems to be a gap between the original printings and their copies. Another intermediate type of work, which is "hard to embody but easy to reproduce," includes computer graphics. CG creation requires time and labor for computer input as well as creativity, but duplication is quite easy once it is completed. It is considered to be the category of works most vulnerable to copyright infringement.

Under these circumstances, it is very difficult to protect the rights of authors and copyright holders as in the past. With the cost for ensuring the actual effect rising to a very high level, it is now questionable whether the grant of rights named "intellectual property rights" produces a higher benefit to society than the cost.

<b>D</b> . <b>0</b>	C1 . C /	C 1 1	1.00 1/	• 1 1•	t and duplication
H1011re 4	( laceification	of works h	w difficulty	'in embodimen	t and dunlication
riguic J	Classification		y uninculty	III CIIIOOUIIICII	t and dupilcation

Easy	Performance	Digital goods	
Difficult	Publication in the early	Music, computer	
	stages, sculpture	graphics	
Embodiment (Vertical			
axis) Duplication	Difficult	Easy	
(Horizontal axis)			

#### 4. Copyright System in the Foreseeable Future

The above discussion suggests some points as follows on copyright in the digital age to us, though they are still somewhat unclear.

(1) It must cover "digital goods," which are easy to embody and easy to duplicate.

(2) We must think of maximizing the whole benefit from "multiple use of a single source" instead of the fixed idea of recovering the cost of a single work with a single copyright.

(3) The prolongation of the duration of rights seems to ensure a stabilization of rights. But the economic analyses show that it could on the contrary increase the cost of next products, as well as induce unlawful or law-evading acts. Therefore it does not necessarily ensure maximization of the benefit (Hamaya, Hayashi & Nakaizumi [2002]). In this era measured in dog years, we should be bold to curtail the duration of rights.

(4) The general principle of the rights should not be based on a fixed pattern but should leave some

room for the discretion of authors or copyright holders. In other words, the rights should be treated not as property rights but as contractual rights as far as possible.

The extreme cases that I envision are things like the Yamashita vault or the Tkachev in gymnastics, or like the stored program system (or the von Neumann computer). Creators will leave their names to posterity and be honored for their creations, but they do not receive monetary benefits from their creations themselves.

What if such strong rights as copyright or patent were granted on these creations? If athletes had not been able to use the highly challenging technique developed by Tkachev without license from him, the gymnastics team of the former Soviet Union would have won every competition and the sport itself would be less and less interesting and ended up with an ever smaller audience.

It is impossible to reach an immediate conclusion on what the copyright system will be like in the near future, but there are four major trends that are thought to stay unchanged.

First, it cannot help seeing coexistence of multiple subsystems in it. It is notable that the current copyright system has incorporated all duplication technologies developed after the printing technologies into a single system. It is indeed surprising that it has survived so many technical innovations including cinematography, records, radio, television, photocopiers, VCRs and karaoke. For the handling of rights, it has introduced various divisional rights, such as the rights of exhibition, distribution, transfer and public transmission, to barely maintain the complex system, although it has been based on the right of reproduction. But the rise of digital technologies could invalidate the "reductionism" behind this. At the same time, it is becoming clear that right holders are not necessarily in solidarity. A good example is the world of software. Some parties, such as Microsoft, are in favor of defending the rights whereas others are oriented towards "commons" through free software and shareware. In this situation, it is almost impossible to maintain the unique and absolute legal system. The monolithic system will inevitably fall apart into several subsystems.

Second, it will be vital to introduce flexibility of copyright duration. At the initial stage of the copyright system, it was just a little longer than ten years, but it was extended every time the law was revised. The Mickey Mouse Law in the United States provides for the duration of "95 years after publication." It has evolved into a law case over constitutionality. It runs counter to social change on a "dog year" basis, and at the same time it embraces the contradiction that it will not necessarily maximize the benefit to authors or copyright holders, as discussed above. There must be a system for flexible management of copyright duration in future.

Third, a loose distributed registration system will be a key to the second point. Unlike patent, which requires registration, copyright is valid without any procedure. But it does not mean that copyright registration is denied. The current law has created a system limited to registration of programs and real names etc., yet it is a centralized system of registration to public authority. If the Internet is a major means of communication by which works are exchanged in the form of intangible

goods, it will be convenient to "provisionally save" works on certain servers, or to "embody" them in a rather relaxed manner instead of "fixing" them as suggested in the current Copyright Law, for copyright confirmation. If this is done with an indication of copyright notice, it will directly serve as a model of a distributed copyright registration system, generally called Electronic Copyright Management System (ECMS).

And fourth, it is foreseeable that moral rights will be more emphasized. The American law still makes limited recognition of moral rights but they will be considered more important if the aspect of works as fruits of expression acts is further highlighted. Even the unauthorized reproductions are expected to produce publicity effects if the right of name indication is observed. An argument for separation of moral rights from property rights was almost synonymous with a suggestion for renunciation of moral rights (Nawa [2000]), but in future the two rights will be unbundled for emphasis on moral rights (Hayashi [1999]).

## 5. Suggestion of Digital Creation Rights (@ mark)

Since spring 1999, I have been making a bold proposal on "digital creation rights" with the  $\bigcirc$  mark (See Figure 4). This move is based on my conviction that there should be a brand-new system for works published on the Internet, one that is based on the current copyright law but covers the four features discussed above.

Designed to enable authors to declare their publication of works on the Internet, the d mark system asks authors to select the duration of their rights from four options of "0 years," "5 years," "10 years" and "15 years," and so specify the number of years after the symbol accordingly. In Figure 4, "0" indicates that this work released on the Internet immediately enters the public domain. Authors are also asked to state the date of publication. Conventional copyright management has normally covered the year of publication but it is believed that it is time now to deal with the day, month and year of publication, and even the hour if necessary. Next, the version is specified with an optional asterisk for clear indication of the terms of the license. For instance, it is possible to add the terms of the license like the General Public License of the GNU project.

Below are some additional descriptions of the suggested scheme:

- (1) Digital authors are entitled to establish their digital creation rights through publication on their own or by agents.
- (2) The work published must be available on the website of the party engaged in administration of publication of "digital creation rights" on business using a widely-used web browser at the time of publication, and must also be reachable as a result of a search on widely-used search engines.
- (3) Digital authors have to ensure the availability of the work while the digital creation rights are valid. When the website on which the work was first presented becomes unavailable due to

closure or others, digital authors must have it continuously presented on another website and make broad notification of it, or they will lose the rights.

- (4) "Digital creation rights" contain the moral rights exclusive to digital authors and digital creation property rights. They must be kept unbundled as long as possible in legal technical terms.
- (5) Digital authors' moral rights contain two divisional rights of "determining the indication of the author's name" and of "preserving the integrity." Digital authors are not allowed to renounce the first one but allowed to virtually renounce the second one by explicitly stating the conditions for modification. It is considered that the right of "making the work public" has already been exercised. Diversion of the digital work to other media for quotation or other purposes can be made as long as it does not breach the right of "determining the indication of the author's name."
- (6) "Digital creation property rights" cover all divisional rights identical to those guaranteed by the Copyright Law, but the duration of such rights can be set in units of five years up to a limit of 20 years. Specifically, there are four options: immediate renunciation of property rights, and reservation of rights for five years, ten years and fifteen years. The death of authors results in the lapse of such rights. The maximum duration has been set at 15 years, to provide equilibrium with patents.
- (7) To the rights attached to the rights of authors or right holders listed in (1) to (6) above, the moral rights and the property rights that are stipulated in the current Copyright Law are applicable with some limitations. Subject to limitations is the part renounced by authors themselves.
- (8) To add the conditions for alteration to digital works, the conditions must be clearly indicated with an asterisk as in "1.0\*" and a contract form attached. However, if contract drafts are excessively flexible, they may undermine the stability of trading. To avert this, consideration on preparation of several types of "general contract terms" is underway, to provide options to users.
- (9) The proposed system for "digital creation rights" is intended for future enforcement as a new treaty that complements the "copyright" system in international cooperation. For the time being, they are defined as private rights at the discretion of copyright holders. In the example, the @-mark and the author's name are indicated using the alphabet with a view towards international institutional coordination.
- (10) "Digital creation rights" are incompatible with analog "copyright" because of the substantial philosophy gap between them. Those who wish to assert their rights are required to explicitly select either of the two rights at the time of creation or publication. Once they have chosen "digital creation rights," they are not allowed to change the selection later, though the change from analog copyright to digital creation rights is possible. For this purpose and following the © mark devised in the Universal Copyright Convention, the @ mark is proposed for easy

distinction and greater safety in transactions.

## Figure 4 Digital Creation Rights

## ( d) - 0, April 1, 2002, Version 1.2\*, Koichiro HAYASHI



6. Essence of @mark and some precedents

My private proposal has three characteristics: (1) a distributed and loose registration system based on publication on the Internet, (2) duration of rights limited to four types including the longest option of 15 years and (3) the emphasis on the right of determining the indication of the author's name. It is aimed at the balance between provision of incentives to future authors (people are not motivated to produce anything without reward) and the public goods nature of information (the value of information is in proportion to the degree to which it is diffused and shared).

With regard to the O mark, there have already been some suggestions. They are similar to one another in that each of them proposes an ECMS, but they can be classified by (1) whether they are incentive-oriented (I type) or public domain-oriented (P type) and by (2) whether they suggest a centralized system (C type) or a distributed system (D type), as in Figure 5.

We will have a brief look at some individual proposals below:

(1) Ted Nelson's "transcopyright" is basically labeled as the I-D type.

<http://www.sfc.keio.ac.jp/~ted/transcopyright/transcopy.html>

(2) Ryoichi Mori's "super-distribution" is a typical I-D type solution.

<<u>http://sda.k.tsukuba-tech.ac.jp/SdA/</u>>

(3) Zentaro Kitagawa proposes "copymart," aimed at protecting the conventional copyright with the use of computers. It falls into the I type and the C type. <<u>http://www/kclc/or.jp/cmhome.htm</u>>

(4) GPL (General Public License) suggested by Free Software Foundation has supplied me with some ideas on the mark. It is basically in the P-D type.

<<u>http://www/gnu/org/licenses/licenses.html</u>>

(5) The "cc" mark proposed by the Berkman Center at Harvard Law School is also classified into the P-D type. <<u>http://cyber.law.harvard.edu/cc/cc.html</u>>

(6) My "① mark" proposal belongs to the D type, but it is unique in that it can be used for the I-D type and the P-D type.

http://www.glocom.org/debates/200204 hayashi proposal/index.html

(7) Content ID Forum is aimed at establishing a broad platform for D type, both for I-D and P-D. <a href="http://www.cidf.org"><u><a href="http://www.cidf.org">http://www.cidf.org</a></u>

The "Creative Commons" project recently launched by Lawrence Lessig et al. is not only close to my plan but also an ambitious attempt to package the software that realizes it. Its future should be closely watched. <<u>http://www.creativecommons.org</u>>

Figure 5 Comparison between ECMS proposals

Orientation System	Incentive (I)	Public Domain (P)	
Concentrated (C)	Copymart		
Distributed (D)	Transcopyright	GPL	
	Super-distribution	"CC" mark	
	d mark	d mark	
	cIDf	cIDf	

These suggestions will fight a "system war" but will continue to coexist for the moment. What was at first the privilege of printing businesses was thought to be an expression of moral rights of creators after popular revolutions and was further reconsidered as a grant of an incentive to creators as the economy matured. This general stream of history will never make a U-turn (see Figure 6). "Smooth distribution of information" is an extension of this. I believe that the "d" mark" is along these lines.

Figure 6 Principle of law on copyright protection

Principle of	Description	Environment	Notes
law		suited	
Exclusive	Rights of dealers authorized to	Absolute	Closely related to
trade rights of	make exclusive publication by	monarchy	etymologies of
printing	the national authority like the		censorship and
businesses	king		copyright
	A type of right that independent	Modern civil	Related to fundamental
Natural rights	individuals inherently have (as a	society	human rights,
	manifestation of freedom of		absoluteness of
	thought and belief and freedom		ownership and the

	of speech and the press)		principle of free contracts
Incentive	Incentive to creators for cultural development	Industrial society	Related to the terms of industrial and intellectual property rights Emphasis on cultural aspects
Smooth distribution of information	Ensuring stability of trade in the society centered on transactions of information goods	Information society in the near future	Related to pricing of information goods, emphasis on industrial aspects, check and balance with the Antitrust Law

In response to these explanations, some of you may doubt whether or not there is any user of a system granting such weak rights or anyone who chooses to declare "digital creation rights" instead of wishing to protect copyright with the  $\bigcirc$  mark. Below, we will look at some cases.

Case 1: Suppose that I am a novice novelist who has yet to achieve any recognition. I have sent my draft to different publishers to promote it but none of them has showed their interest in it. Then, I have decided to make it available on a website for free, that is, with no duration of rights, in the anticipation that someone's attention to it may give me an opportunity to win a subsequent contract. It is almost costless to publish it on a website. Renunciation of the copyright itself means the loss of income that could be gained, but that will not be devoid of meaning if it serves as sales promotion. At present, this approach is often employed by novice musicians to promote their work.

Case 2: Suppose that I have already published several books. In one of them, the first edition nearly sold out, but the publisher told me that they had no plan for a reprint and no copy was left in stock because the sales performance ended below the level for re-impression. I am strongly attached to this work, completed in a relaxed manner, and I hope that it will continue to be available to the public. Thus, I have cancelled the publication contract with the publisher and put it on the Internet so that readers all over Japan can read it with a browser anytime for free (or for a small charge). At that point, a new transaction is launched, on the assumption of this mode of use, which copies the wanted part of a book, attaches a cover and delivers it as if it is a genuine copy of book. There is also a project for electronic reproduction of books the copyright of which has already expired.

Case 3: Suppose that I am a programmer. Having created some software, I recently thought up an algorithm. I developed it into a program as a small subroutine. I feel that it can be applied to many different fields but I have no idea what they are on my own. When I consulted with my friend, he said that if I made it open to the public without restrictions on personal use there is bound to be someone who will find unexpected applications, who may ask me to license their use in their company or their incorporation of the program into a larger software program.

As seen from these cases, the proposed system is mainly anticipated to provide a gateway to success to fledgling creators as in Case 1, to complement paper media as in Case 2, and to serve as quality assurance for "intangible" products such as software through trial offer as in Case 3.

## 7. Conclusion

To sum the discussion above, my view is that the system should have a flexible structure instead of a rigid one, by learning from an architectural solution to strong earthquakes when the trends towards digital and networking technologies shake the conventional system. The copyright system will collapse without flexibility and the introduction of a flexible construction is essential to survival. Key to this is acceptance of the coexistence of multiple subsystems without sticking to a uniform structure like one-size-fit-all system.

This suggestion may well draw the criticism from authors and copyright holders that the proposal itself will destroy the current systems. Contrary to their opinion, I think that flexibility will help the systems last. But not all systems can last. To date, the law has established a single exclusive system. Now it is time that there was competition among systems based on the market principle. With many systems differing slightly from one another, authors, copyright holders and users will have to choose the best system from among them. This is why I make the proposal of a "Flexible Copyright System" (FleCS).

It can be said that we are watching a great war among systems, in which the legal system cannot help but be transformed from a tangible-based one to a system substantially embracing intangible goods. In the past, I had the opportunity to conduct a close study on the war between AT&T and independent telephone systems in the final decade of the 19th century and in the first ten to 15 years in the 20th century. This nearly coincided with another system competition that was too close to call: that between the direct current and the alternative current in the electric utility industry. As a result of major system wars, the two industries reached certain solutions. In the world of copyright as well, there might be a system war. If the war results in an integrated system, it will have been worthwhile. Or if compatible subsystems survive the war, it should also be all right. Why not think in a flexible manner like this?

To conclude this paper, I once wrote an article entitled "Will copyright law be a prohibition law?" (Hayashi [2001a]) My argument may sound inconsistent unless I keep saying that it will be a prohibition law as a scholar, but as a matter of fact I subsequently changed my mind. In fact, I did not compare the copyright law to the National Prohibition Act of the United States. The paper merely discussed the stance towards the comment of Rob Glaser, CEO of Real Networks: "The mode we're in right now is kind of a Prohibition period." At the moment, if you asked me what law is close to

the copyright law in terms of structure, I would rather say that it is the Labor Standard Law. This involves some points to be discussed but in this paper I will not go any further than hinting at it.

<References (In English)>

Calabresi, Guido and A. Doughlas Memaled[1972] 'Property rules, Liability rules, and Inalienability' 85 "Harvard Law Review "1089

Lessig, Laurence[1999] "Code and others Laws in Cyberspace" Basic Books

<References (In Japanese)>

Hamaya, Satoshi, Koichiro Hayashi and Takuya Nakaizumi [2002] 'Survey: Economic Analyses on Copyright' FRI Research Report No.113, Fujitsu Research Institute

Hayashi, Koichiro [1999] 'd mark Proposal' "Media and Communications" Keio Univ.

Hayashi, Koichiro [2001a] 'Will copyright law be a prohibition law?' "FRI Review" Vol.5,No.1, Fujitsu Research Institute

Hayashi, Koichiro [2001b] 'Distribution and Legal Protection of Intangible Goods' in Okuno, Masahiro and Nobuo Ikeda(eds.) "Informatization and Transformation of Economy" Toyo Keizai

Nawa, Kotaro [2002] "Changing Information Infrastructure" Kansai Univ. Press