Comparative Analysis on the Intellectual Property Right Policies of Standardization Organizations

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ABSTRACT

The characteristics of the intellectual property right(IPR) conflict with standardization. This is because standardization aims to achieve the common use of technology while IPRs aim to protect the proprietary right on technology. The license to use IPR should be granted so that standards can be used without an infringement. IPR policies have common characteristics in most parts of their contents and also have different application methodologies. The ultimate object of IPR policy is to receive license grant.

In this paper, significant typical IPR policies of main standardization organizations are comparatively analyzed. The overall objective of the IPR policy is to make strategic environment for license grant. IPR disclosure becomes the best practice to acquire license grant. With this practice, the action to licensing refusal becomes one of the main strategic factors of IPR policies.

Ⅰ. Introduction

Standardization must be harmonized and coordinated with intellectual property rights(IPRs). They often conflict each other as standardization promotes the common use of technology and, on the other hand, IPR protects the proprietary right of developed technologies. To solve this problem, most of standards development organizations (SDOs) or standardization bodies have their own policies which contain principles, rules, and procedures to handle IPR matters in the process of standardization. These policies are generally called IPR policy.

IPR policy can be defined as a directive in which norms, methods, and all sorts of action strategies are prepared to coordinate the conflict between standardization and IPR, so as to accomplish harmonization between them. The basic action strategy of IPR policy begins with solving the problem of license grant for the practice of IPRs to be included in standards. License grant is the essential subject for the accomplishment of standardization. IPR policy will provide standardization bodies, participants, and all related users with normal rules. IPR policies differ from one another in their codes of practice, but have very similar systems and common principles. Such common principles are based on the principle of relation between standardization and IPR[1].

In this paper, comparative analysis on these IPR policies was performed by the elements of IPR policy. In Chapter II, the principle of relation between standardization and IPR and the functions of IPR policy are explained. In Chapter III, framework definition for comparative analysis is described. The distinguished characters of each policy selected are pointed out separately. Several principles of IPR policy are abstracted and formalized from comparative analysis. The implications commonly or differently contained in the policies are summarized in the conclusion.

Ⅱ. Relationship between IPR and Standardization

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1. Relationship between standardization and IPR

Each of standardization and IPR is independently a significant action field. The relationship between them is simply thought from their characteristics of opposition to each other : standardization is for common use while IPR is for proprietary use. However, there is a basic difference between them in the view point of balance. The problematic thing occurs in standardization, not in the field of IPR. There is nothing blocking in the activitites related to IPR area itself due to standardization. To the contrary, IPR must be critically considered in standardizing acitivities because a license to use IPR included in a standard must be granted to anyone who wants to use or implement that standard for production ; otherwise infringement on that IPR will occur. Standardization may merely be considered strategically in IPR management. This is because IPR is more primitive than standardization, or IPR is more original than standardization because IPR recognizes individuality[2].

2. Functions of IPR policy

Standardization will come to get a blow if a licensing refusal state occurs. Therefore, prevention against it, which will pave the way for the attainment of license grant, is a significant target of IPR policy. IPR policy produces the strategic circumstances to achieve the target and practices the rules for that purpose in an efficient way. IPR policy performs the following functions to coordinate standardization and IPR, and to accomplish harmonization between them.

- Presenting the types of way of granting a license for IPR use
- Presenting the principles and the limitations of responsibilities to be considered in a standardization organization
- Encouragement and inducement of license grant, and such a formation of strategic circumstances
- Prompting the awareness of the IPRs related with standardization
- Presenting the direction of action according to the types of license grant
- Extension of method to find IPRs related with standardization : this is to purport the maximization of elimination of the potential possibility that IPR infringement would occur, and to make procedures of IPR identification according to standard making process for such a purpose.
- Ensuring confirmation to the licensing intention of IPR holder : defines normal processing methods to confirm such a willingness
- Formation of connecting route between users of standards and IPR holders : defines the minimum intermediate roles as what standardization organizations can do.
- Offering the rules for copyright handling related with the documents generated in the process of standardization.
- Opening and offering the notified items of IPR information related with standardization, etc.

Ⅲ. Comparative Analysis on the IPR policies

1. Framework definition

There are following 10 elements for comparative analysis by the subjects of policy contents. These elements are defined as the common factors existing explicitly or implicitly in almost all policies.

①Kinds of IPR to apply : as to classification of IPRs, what sort of IPR each policy deals with will be comparatively analyzed.

②Presentation of options to be taken as IPR licensing methods : basically there are three types of licensing : no royalty based; on reasonable terms and conditions with nondiscriminatory basis; licensing refusal.

③Deriving strategy for IPR disclosure : requirement of earliest disclosure, procedural requirement of disclosure, frequentativeness of disclosure, due date requirement, and the continuity of disclosure

④Deriving strategy for license grant : this is a upper level element of policy covering other

elements

⑤Action strategy to licensing refusal : holding standardization, altering the technical contents of standardization or amending them, canceling standardization, practicing of vote to determine the process of standardization

⑥Treatment to appearance of rights after publication of standards

2. Selection of IPR policies to analyze

The policies of appropriate standardization organizations were selected to be analyzed with such consideration that covers the regional areas, representativeness and characteristics of bodies. The selected standardization organizations are as in Table 1[3].

Table 1. Selected standards bodies' for their IPR policies analysis

Types of Bodies		Bodies
Official Institute	International	ITU, ISO/IEC
	Regional	ETSI
	National	ANSI, TTC
De facto srandardization		ATM Forum, IETF, Frame Relay Forum, ECMA

3. Main Characteristics of Policies

- ITU : Viewing the standardization procedure as three steps - the composing step of first draft recommendation; completion step of the first draft; submission step for approval of final draft recommendation, it prompts necessarily to carry out the notification of IPR just before the third step[4].
- ISO/IEC : ISO/IEC rules on patent matter can be explained by three parts. In the first part, when relevant rights are notified to the central office of ISO/IEC, the proposer of standard shall request to the IPR holder a statement that he is willing to license. In the second part, ISO/IEC requests to note the possibility of existence of rights. In the third part, it is expressed that the policy will apply in the same rule when relevant patent rights appear after publication of standards[5].
- ETSI : In the licensing refusal by members, an alternative technology is investigated. If it could not be found, the standardizing process is halted. In the case of refusal by non-members, voting is practiced to decide whether to proceed the standards-making process. Reporting to the EC(European Commission) can be planned as the final resolution procedure[6,7].
- ANSI : The general disclaimer of rights as the same effect as one does not have the right from the beginning, which implies that licensing is not needed, is presented as one of the types of licensing. Early disclosure of known patent rights is stressed in its Guidelines[8].
- TTC : The most big characteristics of TTCs policy is that it makes deliberate connectivity of IPR disclosing with the whole procedures of standardization[9].
- ATM Forum : They use voting method in the situation of licensing obscurity.
- IETF : They permit a delay of standardization processing schedule for IPR disclosure purpose. They proceed the standardization track to determine the specification regardless of the license availability[10,11].
- Frame Relay Forum : Frame Relay Forum's IPR policy stresses the necessity of IPR disclosure by exampling the case of Federal Trade Commn v. Dell Computer Corp., 60 Fed. Reg. 57,870 (Nov.22,1995)[1)][12].
- ECMA : ECMA uses the general declaration that a standard cannot be approved without licensing. This means that license grant should be premised. ECMAs policy has particularly more weighted patent application.

4. Comparative Analysis

4.1 The kinds of IPR

Table 2 below is representing the analyzed

1) Although Dell comp. did not disclose their rights obviously saying that they would not consider any use of standards made in the related VESA as infringing their IRRs, they prosecuted the VESA meberscompanies. But it received the decision of anti-trust violation by the opponent companies reverse appeal.

results for comparison by the types of rights presented in each policy.

Table 2. Presented sorts of IPR on the policies

IPRs \ Body		ITU	ISO/IEC	ETSI	ANSI	TTC	ATM	IETF	FRF	ECMA
Industrial Property Rights	Patent	O	O		O	O	O	O	O	O
	Utility Model		O							
	Trade-mark			X						
	Design			X						
Copyright							ρ	O		
Neo-IPRs										
Application		O	O	O	O	O	O	O	-	O
Comments			Including others							

*ATM: ATM Forum, FRF: France Relay Forum

4.2 Presentation of licensing types

Licensing principles are represented in the below Fig 1 at a glance.

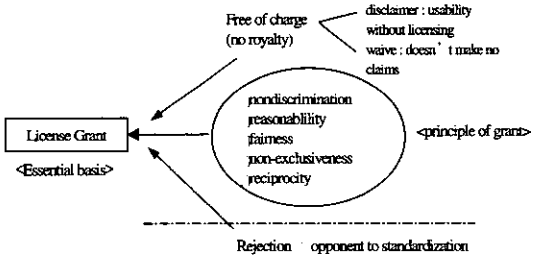

Fig. 1 Basic principles of license grant

Table 3. Presentation of the licensing principles

Bodies \ Types	Basic 3 types			Description of 5 principles				
	Free of charge	Reasonable condition	Licensing refusal	p_1	p_2	p_3	p_4	p_5
ITU	O	O	O	O	O	O		
ISO/IEC	-	O	-	O	O			
ETSI	-	O	ρ	O	O	O		
ANSI	O	O	X	O	O		O	
TTC	O	O	ρ	O	O	O		O
ATM Forum	-	O	ρ	O	O			
IETF	-	O	-	O	O			
FRF	-	O	-	O	O			
ECMA	-	O	-	O	O			

p_1 : reasonability, p_2 : nondiscrimination, p_3 : reciprocity, p_4 : fairness, p_5 : non-exclusiveness

Table3 is representing the analyzed comparative result. The principle appearing in all the policies as a very inclusive factor. The free of charge type might be included in the one sort of reasonable conditions.

4.3 Deriving strategy for disclosure

The degree of requirement for disclosure of IPRs has some variable characteristic according to the process of standardization. The most important point in notification is at the time of that action at least just before approval of standard as possible as can be done. There are five characteristic elements in the disclosure process as belows on timing basis.

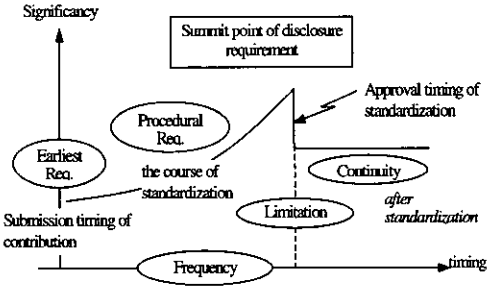

Fig. 2 Timing characteristics of IPR disclosure

- Requirement of earliest disclosure : IPR notification is as good as done early from the beginning of standardization.
- Procedural requirement of disclosure : The degree of requirement has the character to change according to the main steps of standardization.
- Frequentativeness of disclosure : IPR disclosure is not restricted to any determined time point but possible and needed on any time.
- Due-date requirement of disclosure : But IPR policies has put a due date as baseline of time limit for disclosure as to above procedural timing requirement of disclosure. This due-date is generally at time just before approval.
- Continuity of disclosure : IPR disclosure is still needed and effective continuously after approval of standard.

4.4 Action to licensing refusal

The first step reaction to licensing refusal is to stop the processing of standardization. And then they find alternatives to replace the current making standard. Or they make amendment or correction to it or examine it to the direction of avoding the IPR technically. If these avoiding treatments are even impossbile, they may cancel the standardization or abolish the standard already made. Table 5 shows these schems.[13].

Table 5. Action types in licensing refusal state

B \ T	Hold	Alter	Amend	Cancel	Vote
ITU	O	O	O	O	
ISO/IEC	O	O	Review		
ETSI	O	O	O	O	
ANSI	O	O			
TTC	O	ρ			
ATM				O	O
IETF	Delay				
FRF					
ECMA				O	O

4.5 Measures to the rights appearing after standardization

Relevant IPRs can appear after publication of standards in the following reasons: Disclosing relevant IPRs in the processing of standardization is by the best and voluntary efforts to protect IPR infringement in advance, and is not activity of character that any compulsory methods can be involved for it. The relationship of licensing necessity with the risk change of standardization is represented in (Fig.5). Independent IPR search or investigation cannot be carried out to find any IPR existences. Therefore the possibility of appearance of relevant IPRs always exists. In this situation, the necessity of licensing is still the same.

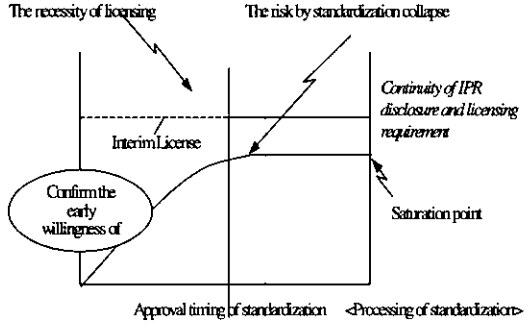

Fig. 5 Licensing requirement and the risk change

Ⅳ. Conclusion

Basically, IPR which has the attribute to block standardization should be licensed so that the general accessibility of standard may be attained. It needs to be premised that participants to standardization will give a license for others practice of their IPRs. The greatest and unique goal of implementing all the procedures of IPR policy for standardization activities is focused to the acquisition of license from IPR holders which is the necessary condition for the stable establishment of standardization after all. At the same time, it may be said to make right harmonization when efforts for license acquisition are carried out in the compromised range in which IPR holders free willingness is respected to an appropriate extent.

The significant differences among policies can be discussed from the decision methodology in the situation of obscurity of license acquisition. In the position of official standardization bodies, they do not proceed standardization in the state of licensing obscurity. Since de facto standardization require reality and adaptability in direct market competition or practical spot application, and it makes standardized technical specifications in the technology field led by the participants, and also the duration of de facto standardization body is often temporary, the decision of standardization could be more necessary rather than the settlement of IPR matters in the de facto standardization activities. The problems to occur thereafter would be left to interesting parties.

All policies should pursue the harmonization between standardization and IPR. The optimality of IPR policy might be accomplished on the basis of a proper balance between standardization and IPR. For it, they should compromise on equivalence. IPR should give way to standardization through license grant, and standardization should recognize the proprietary right of IPR with fairness and acceptance. In this meaning, IPR should not be abused against standardization and standardization cannot regulate IPR.

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