2012 International Conference on Applied Physics and Industrial Engineering

Research on Intellectual Property Conflicts Identification in Knowledge Transferring among EC Enterprises

shibin Su

School of Management Fuzhou University
Fuzhou,China

Abstract

As the lacks of existing research about intellectual property conflicts management of EC enterprise, the paper analysis the intellectual property conflicts in knowledge transferring among EC enterprises by intellectual property types, then, the paper makes research on intellectual property conflicts identification in knowledge transferring among EC enterprises, and gives relative assumption, meanwhile, the paper makes quantities identification of intellectual property conflicts in knowledge transferring among EC enterprises by evidential theory, finally, the paper gives the further research orientations.

1. Introduction

New economy characterized by networks, knowledge management and globalization in 21st century. EC has become new light and future business development trend to spur economy growth increasingly, and can improve social economy efficiency. EC develop rapidly in china, knowledge transferring in knowledge management is an important links to develop EC among enterprises. The process of knowledge transferring among EC enterprises follow the obtaining, development and usage to interior and exterior resource, personal knowledge transform EC enterprises' knowledge, knowledge sharing etc. which will bring many uncertain factors, especially in the background that intellectual property indexes in china ranked second[1] in major Asia countries, which is unavoidable to bring intellectual property conflicts in knowledge transferring among EC enterprises, however, the management level of intellectual property conflicts in Chinese EC enterprises is ineffective, and need to be improved[2], existing intellectual property regime can't also realize effective intellectual property conflicts management in EC enterprise[3].Therefore, without making network intellectual property laws, it is necessary to improve

intellectual property conflicts management level for Chinese EC enterprises, especially the improvement of intellectual property management conflicts in knowledge transferring among EC enterprises will spur the development of Chinese EC enterprises.

2. Research on intellectual property conflicts types in knowledge transferring among EC enterprises

In eye-economy, absorbing consumers is a precondition to carry out EC and to obtain profit. A well-thinking, rich content, beautiful webpage EC website is very important to absorb consumers. The cores of EC website are datum, which include various works (such as writing works, photograph works, music works, and movie works etc), data bases, various links (normal links, embedded links, deep links and frame links etc) and domain etc. To improve EC enterprises' achievements by absorbing more consumers, EC enterprise must conceive its various datum rationally and public display by website effectively. In knowledge transferring among EC enterprises, the subjects of transferring are various involved datum. Which is helpful to carry out EC among enterprises, however, it is necessary to induce intellectual property conflicts among EC enterprises. Now, in intellectual property conflicts of knowledge transferring among EC enterprises, knowledge senders realize to protect various transferring datum by copyright law generally. This maintains various legal rights and interests for original EC websites of knowledge sender, and promotes to carry out EC among enterprises in early stages. With the further development, EC websites contents become richer and richer, datum types of EC websites appear more and more diversity, it can't make up for various damages (such as economic damages and others intangible damages) come from intellectual property conflicts to protect various intellectual property in knowledge transferring among EC enterprises depend on copyright laws only. Therefore, it is necessary to analysis intellectual property conflicts in knowledge transferring among EC enterprises concretely, and adopts different coordinate countermeasures to spur knowledge transferring among EC enterprises by research results.

In knowledge transferring among EC enterprises, various intellectual properties in many datum deliveries by EC website, therefore, intellectual property conflicts in knowledge transferring among EC enterprises embody by EC website. The major colors, pictures, word combination etc in EC website, give consumers aesthetic feeling, which reflects a certain original thinking, can be represented by certain media, and can be copied, which are fitted to the features and requirement of works, it can obtain proprietary copyrights since it is public [4], therefore, it is easy to produce copyrights conflicts in knowledge transferring among EC enterprises. Some marks, photograph works, brands or commodity name etc in EC websites, maybe various significant signs for enterprise. It can be diffused by knowledge transferring among EC enterprises. If the knowledge receiver in knowledge transferring among EC enterprises uses these signs without the permission of knowledge sender, it will infringe the trademarks or brand of knowledge transferring [4], and results in trademarks conflicts. In knowledge transferring among EC enterprises, if knowledge receiver does same or similar businesses with knowledge sender, and theses businesses make consumers confused to service or commodities, or mislead consumers that there exist certain relationship between knowledge sender and knowledge receiver, this will be considered unfair competition for knowledge receiver. When some EC methods of knowledge senders' websites among EC enterprises obtain patent as its innovation, once knowledge receiver infringe the patent, it will result patent conflict. When knowledge senders among EC enterprises keep some data bases secret by some methods, knowledge receiver obtain these data bases by knowledge transferring and public it or use it itself, then, receiver of knowledge transferring not only infringes copyright of knowledge senders, but also infringes business secrets of knowledge senders, and produce business secrets conflicts in knowledge transferring among EC enterprises. In knowledge transferring among EC enterprises, when EC website is

linked, especially embedded linked, deepen linked and frame linked, it will be confused among consumers, and produce unfair competition[5] etc.

Obviously, in knowledge transferring among EC enterprises, it will produce various intellectual property conflicts, such as copyright conflicts, trademark conflicts, unfair competition, business secret conflicts, patent conflicts and others conflicts.

3. Analysis and hypothesis of question

3.1 Analysis of question

In knowledge transferring among EC enterprise, different intellectual property conflict will be produced, even appear at the same time, the only differentiate is that a certain or some certain type intellectual property appear obviously in some time, however, others types intellectual property appear more obviously in other moment. To EC enterprise of knowledge sender, it is not necessary and impossible to pay attention to all intellectual property conflicts; it must pay more attention to different type intellectual property conflicts by different stage of knowledge transferring. Which intellectual property conflicts should be paid attention, which intellectual property conflicts should not be paid attention; it will be decided by the facts of knowledge transferring among EC enterprises. To intellectual property conflicts in knowledge transferring among EC enterprises, only relative employees of knowledge sender and knowledge receiver can understand, from knowledge senders, the information about intellectual property conflicts are difficult to obtain from knowledge receiver directly as the consideration of interest. Therefore, it can only be identified by several employees of knowledge senders that participant in knowledge transferring. Among the mathematical theorem models to quantify individual perception, knowledge and experience, the theory of Eevidential is one of the best mathematical theorem models undoubtedly [6], which are determined by the characteristics of evidential theory. Therefore, the paper will realize intellectual property conflict identification in knowledge transferring among EC enterprises by Eevidential theory.

3.2 Notation hypothesis

To build up model, it makes the following notation hypothesis:

X_1：Copyright conflicts in knowledge transferring among EC enterprises;
X_2：Trademark conflicts in knowledge transferring among EC enterprises;
X_3：Unfair competition conflicts in knowledge transferring among EC enterprises;
X_4：Business secret conflicts in knowledge transferring among EC enterprises;
X_5：Patent conflicts in knowledge transferring among EC enterprises;
X_6：Others conflicts in knowledge transferring among EC enterprises;

The discriminating frame Θ of the research is exponential set which composed by synthetically appraise remark set H= [X_1； X_2； X_3； X_4； X_5； X_6]

3.3 Model hypothesis

To set up identification model, we make the following assumptions: (1) every expert make answer by his knowledge, previous experience and his analysis and research to the problem;(2)if we are expert, and we have the same knowledge, experience with other expert, we can draw the same answer, therefore, after consulting, we can obtain differ results by differ evident.

4. Research on intellectual property conflicts identification in knowledge transferring among EC enterprises

In a knowledge transferring among EC enterprises, to identify major intellectual property conflicts in some moment, it has to make decision by the judgment of relative employees of knowledge senders that are involved in knowledge transferring. Yanglei(2004) thinks, in the research of experts group, if pay more attention to minds coherence, the appropriate expert numbers are 2-5; if pay more attention to quality, then, the fittest expert numbers are 5-11[6]. Therefore, the survey selects 6 correlate experts; the results are as Table 1.

Table **1** Synergetic tabulation of questionnaires

Expert 1	Expert 2
m_1 (X_1；X_3) =0.8	m_2 (X_1；X_3；X_4；X_6) =0.75
Expert 3	Expert 4
m_3 (X_3；X_6) =0.8	m_4 (X_2；X_6) =0.85
Expert 5	Expert 6
m_5 (X_1；X_6) =0.8	m_6 (X_1) =0.9

The paper deals with the data of Table 1 by making use of synthetical formulary

$$of\ m(A) = \begin{cases} 0, A = \varnothing \\ \dfrac{\sum\limits_{A_i \cap A_j = A} m_1(A_i)m_2(A_j)}{1 - \sum\limits_{A_i \cap A_j = \varnothing} m_1(A_i)m_2(A_j)}, A \neq \varnothing \end{cases}$$. m_1，m_2 is referred to basic belief admeasure in

discriminating frame, A_i，A_j is focus correspondingly.

At first, we combine the survey results of expert 1 and expert 2 (see Table 2).

Table 2 Survey synthetical processes between expert 1 and expert 2

	m_2 (X_1；X_3；X_4；X_6) =0.75	m_2 (Θ) = 0.25
m_1 (X_1；X_3) =0.8	(X_1；X_3) =0.6	(X_1；X_3) =0.2
m_1 (Θ) = 0.2	(X_1；X_3；X_4；X_6) =0.15	(Θ)=0.05

$m_1 \oplus m_2$ (X_1；X_3) = 0.6+0.2=0.8；
$m_1 \oplus m_2$ (X_1；X_3；X_4；X_6)=0.15；
$m_1 \oplus m_2$ (Θ)=0.05；

According to above combination step, we can synthesize the above synthetical results (expert 1 and expert 2) with the survey results of expert 3 again. Then, we can synthesize the survey results of expert 4, expert 5, and expert 6 also. The ultimate synthetical result are following:

$M_{combination}$(O)=0.9506 ; $m_{combination}$ (X_1)=0.0294 ; $m_{combination}$ (X_6)=0.01875 ; $m_{combination}$ (X_1；X_6)=0.00048 ; $m_{combination}$ (X_1；X_3；X_4；X_6)=0.00009 ; $m_{combination}$ (X_2；X_6)=0.00017 ; $m_{combination}$ (X_3；X_6)=0.00048 ; $m_{combination}$ (Θ) = 0.00003

According to above synthetical results to survey of expert, in the knowledge transferring among EC enterprises, it must pay more attention to copyright conflict（$m_{combination}$ (X_1)=0.0294）, then is others

conflicts （$m_{combination}$ (X_6)=0.01875）. This gives quantitative gist to intellectual property coordination in knowledge transferring among EC enterprises.

5. Conclusions

Based on analyzing intellectual property conflicts in knowledge transferring among EC enterprises, the paper make quantitative identification on the intellectual property conflicts in knowledge transferring among EC enterprise by evidential theory. There exists much need to be studied further. Firstly, the paper only identifies intellectual property conflicts types in knowledge transferring among EC enterprises, what impacts these conflicts to EC enterprises, this is a question needed to be studied further. Second, the paper identifies intellectual property conflicts in knowledge transferring among EC enterprises in theory, but how to magnify intellectual property conflict identification in knowledge transferring among different EC enterprises is also needed to be solved etc.

References

[1] SU Shi-bin, HUANG Rui-hua, HE Rui-qin，Study on Intellectual Property Risks Induced by Transferring Media in Collaborative Innovation [J] ，R&D management，2006，18（4）：72-76

[2] SU Shibin，New Orientation for Knowledge Management Research in EC－－Research on Intellectual Property Conflicts Management in Knowledge Transferring among EC Enterprises [J]，Science of science and management of S.&T，2009，（9）：85-88

[3]Xia Lu. Explore on intellectual property protection in global EC[J]，SCIENCE & TECHNOLOGY PROGRESS AND POLICY，2000，17（7）：127-128

[4]Zheng wenyin, Research on intellectual property in EC [J]，Modern Business Trade Industry，2009，（8）：246-247

[5] Niu Yuke，The Unfair Competition and its Regulation Under the Network Conditions [J]，Economy and Management，2009，23（6）：58-61

[6]Duan Xinshen,evidential theory and decision, artificial intelligence,People's Colloge of China Publishing Company,BeiJing,1993

[7] YangLei,Group Decision Theory and Application-Research on individual preference massway in group decision,Economic Science Publishing Company, BeiJing,2004