

## **A Study on Electronic format and Distribution plan for Increase of Efficiency in Document Battle procedure in Electronic lawsuit**

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**Abstract.** Today's civil lawsuits are being done through "Document battle" in its series of trial in which plaintiff and defendant claim or refute by written document. In our country electronic lawsuits were executed for entire civil lawsuits from patent electronic lawsuit in 2012 to execution and non-litigation electronic lawsuits, and existing document battle procedures on March 23 2015, which was delivered to court, plaintiff, and defendant via mail delivery, were written and delivered (distributed) via electronic document. Under this electronic lawsuits system, the method of writing such as petition, answer, requires to be improved according to electronic lawsuits. That is, it can be said that the development of the structure in electronic forms, form generator supporting this, and an electronic document viewer for document battle forms is urgent in order for the offense and defense of one claim to be consistently shown, after writing of each claim for the petition of document battle procedure, preparatory documents, and written answers for document battle procedure, so that both court and plaintiff/defendant who should judge through document battle will effectively use electronic lawsuits. In particular, solitary lawsuits are rapidly being increased due to consciousness improvement and expansion of education level, and the movement by Legal Aid Corporation to intensify the service for "the weak in judicial service" now appears. At this point, if "Smart document battle procedure", using IT technology, is supported so as to conform to "the principle of simple and easy description", "the efficiency of document battle procedure" in electronic lawsuits will be increased through "convenience of review about fact acknowledgment procedure", and "consistency in claim and refutation" to court, plaintiff, and defendant.

**Keywords:** Electronic lawsuits, Electronic form structure, Document battle, Document search, Record review

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## **1 Introduction**

In our country electronic lawsuits are being executed after execution and non-contentious lawsuits in 2015 since patent electronic lawsuits in 2012. The procedure of document battle, which was done by mail delivery in the past, is now being distributed (delivered) by electronic document. Under electronic document distribution system, the method of writing document needs to be improved for electronic lawsuits. According to regulations in 8(a), (b) in Federal Rules of Civil Procedure of U.S (hereinafter FRCP) and practical custom of U.S courts, they traditionally keep "short and plain statement rule" in writing document. As a system to prevent parties from exchanging redundant and incoherent documents from pleading and aim efficiency of lawsuits, this principle methodologically makes use of items specified in petition, and shows the facts and claims of each count, and in case of response document, they make them written in response to describing order of petition. In Korea this principle of document writing has not been correctly observed in structure of electronic forms and application base. Electronic document, which does not describe each cause of action, requires more time, efforts, and user experience than paper document.

Therefore, an efficient tool based on "a short and plain statement rule" is required for the court, who should judge through document battle under electronic lawsuits, as well as the parties who should effectively submit their claims and answers, in overall course of electronic writing, submission, and reviewing.

## **2 Change in structure of electronic document and information storage**

In electronic lawsuits the lawsuit information and electronic document is basically composed with case number being a primary key. The information composed of 1:N, based on case number, is in structure to receive lots of information which could occur in the process of a litigation like the parties, electronic document, order, and determination, but is in 1:1 structure for the cause of action which becomes the standard of document battle. This is because it is not done in a structural format due to nature of cause of action information, and it is desirable to newly create it upon user's necessity, rather than restructuring existing information structure. Also, structural change of electronic document requires creation of logical document, by dividing electronic document per page, rather than integration or dividing of electronic document itself.

## **3 Document creation by using Document-Assembly-Package XML standard**

Document-Assembly-Package (hereinafter DAP) is a technique to show in a logical document type after extracting only the pages required in many PDF documents. It creates and provides a logical document by using this technique so that the claim of

the other party will be directly followed in each cause of action from electronic document submitted by the parties. And it supports each document by using watermark so that record examiner can intuitively recognize concerned document.

```
<assembly>
  <document path="/p Logical document for document battle
  <document path="/p plaintiff_preparatory document. cause of action  '/>
  <document path= defendant_answer_cause of action b, 8, 10"/>
  <watermark />
</assembly>

<assembly>
  <!-- text watermark sample -->
  <watermark type="text" colorR="0" colorG="0" colorB="0" opacity="50" alignment="132" fontSize="20"
  A preparatory document 2015.3.1 of plaintiff for cause of action 1
  </watermark>
  <watermark type="text" colorR="0" colorG="0" colorB="0" opacity="50" alignment="-1" fontSize="20"
  An answer 2015.4.1 of defendant for cause of action 1
  <!-- image watermark sample -->
  <watermark type="image" opacity="50" alignment="-1" imageRatio="50" x="0" y="0" >
  or defendant did not answer for above preparatory document
</assembly>
```

Fig. 1. Create logical documents defined by each cause of action

The point for cause of action to be first created is when plaintiff writes a petition. Currently, the cause of action when writing a petition is not divided by its cause, but freely described. We should provide an input type in which these writing types could be divided and written for each cause of action.

And when reviewing the record, a list in type that offense and defense could be viewed at first sight for each cause of action should be provided, and if existing list is in a simple list type of a line based on submission date, it should be provided in a list of multi-dimensional tree type that can show the relationship based on cause of action.

#### 4 Conclusion and additional study matters

A structural change for the structure of electronic document and distribution of electronic document (record review) is needed to secure efficiency of document battle procedure. However, this structural change must be supported by social sympathy for the principle of trial system for rebuilding of electronic lawsuits infra and plain and “simple writing rule”. Therefore, finitely applying it to Legal Aid Corporation for solitary lawsuits and the disadvantaged in judicial service provided by the judicial branch should be devised as an action plan.

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