







target factor), investigation factor (by investigation factor), by investigation analysis factor, and factor -, and the mixed type is that in which research contents are analyzed in a different way in each step. Of all the research papers, 7 theses (7.69%) had the regular type, while 84 theses (92.31%) had the mixed type. In the case of the regular type, the analytical study for the following step of target factor (by target factor) was that the research contents were analyzed by investigation factor and by investigation factor. That is, both the common and the individual pattern by investigation method and by analysis progress type used the mixed type (94.12%, 64 theses) most (the regular type: 5.88%, 4 theses), which means that in the analytical study of the research contents, irregular progress is used more often than regular progress.

#### **4. Relationship between research fields and patterns**

In order to clarify the relation between research fields and patterns, patterns were analyzed by research field and investigation method, as well as by analysis progress type. Of the research fields, 'the product' had the mixed and the regular analysis progress type by common pattern investigation method. 'Design process' had the mixed analysis progress type by common pattern investigation method. Other research theses of the same field used the same pattern type. It was found that such research fields showing a regular pattern type have a lack of diversity in terms of the investigation method, and have an irregular analysis progress type.

#### **5. Conclusion**

This paper classified and analyzed the collection of theses published in the Journal of Korean Society of Design Science for the purpose of examining the flow and the analytical study of research contents and of constructing information supply routes. As a basic step to re-organize the analytical study of design research contents, this paper diagrammed and patternized research contents, and obtained the following results.

Of a total of 91 research papers, 68 theses were classified by pattern, and 4 features of patterns were found, as per the below: (1) Common investigation method and mixed analysis progress type, (2) Common investigation method and regular analysis progress type, (3) Individual investigation method and mixed analysis progress type, (4) Individual investigation method and regular analysis progress type

In terms of the relationship between research fields and patterns based on the above 4 features of patterns, this paper could clarify that particular research fields show a regular pattern type. Through the features of the patterns of research contents, this paper could express the analytical study and the progress type of research contents in the form of simple diagrams and patterns, which will make it easy to understand the research features of all research contents. This can therefore be used as the information route through a classification system and as a basic step for content search. Through classification based on the patterns of the research analytical study and its use, it will be possible to predict new research contents. For more stable diagramming and features of patterns, a comparative analysis of cases by nation will be made, and its result will be reported.

#### **References**

- [1] Jeong Geong-Won. (2006) Design Management, Ahn Graphics, pp154-155
- [2] C Written by Alexander/ Translated by Hirata Kanna. (1999) Pattern Language, Nokdo Publishing, ppXiV-Xxii
- Han Ho-Taek. (1995) Comparison between Qualitative Analytical Study and Quantitative Analytical Study in Social Science, Graduate School of Inha University, Master's degree thesis, pp4-20
- [3] Ruth Benedict, Pattern of Culture, Yeonamseoga, (2008) p101
- Gong Seon-Pyo. (2008) Art of Think Creation, ReadersBook, pp40-41