Topics (Inventions of compounds identified by screening method)

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On April 4, 2000, Examination Standard Department of the Japanese Patent Office called for opinions, as a case study of examination in chemical related fields, on its proposal as to how to deal with inventions of compounds identified by screening method as well as inventions of pharmaceutical use identified by the same method. This proposal contains extremely strict requirements and much attention should be paid to the future decision on its application. At this time, we would like to present a case study given by the Japanese Patent Office as follows. We will deal with this subject when the final draft is available.

Claimed invention:

1. R-receptor activation-substance obtained by the screening method comprising of the treatment to determine whether subject compound activates R-receptor when subject compound comes into contact with R-receptor expression cell.

2. Obesity Inhibitor of which active ingredient was obtained by the above mentioned method.

The following two different levels of disclosure were presented regarding the above hypothetical claims:

Disclosure in detail explanation:

Case 1

(1) The applicant was the first person to identify R-receptor.

(2) The method for screening R-receptor activation-substance as well as obesity inhibitory effect of R-receptor activation-substance was discovered by the applicant. (3) Though several specific compounds of R-receptor activation-substance were disclosed, neither preparation method of R-receptor expression cell nor the method for making subject compound contact with R-receptor expression cell nor the method to confirm the activation of R-receptor by subject compound were disclosed. Further, there was no confirmation of determining activating ability of specific compound or its obesity inhibitory effect.

Proposed handling by the Patent Office: The extent of disclosure of this invention does not reach the level to satisfy enablement requirement. Needless to say that it is not possible to make addition to each method after application, there is no possible restoration, even if the applicant would claim and demonstrate enableness in the argument and experiment certificate submitted after application.

Case 2

(1) The applicant was the first person to identify R-receptor.

(2) It was the applicant who discovered the screening method for R-receptor activation-substance and found that R-receptor activation-substance had obesity inhibitory effect.

(3) Several specific compounds of R-receptor substance were disclosed. Also, the preparation method of R-receptor expression cell and the method to make subject compound contact with R-receptor expression cell as well as the method to confirm whether subject compound activates R-receptor were disclosed. Further, there was confirmation of specific compounds' ability to activate R-receptor and their obesity inhibitory effect. Proposed handling by the Patent Office: The extent of disclosure of this invention does not reach the level to satisfy enablement requirement for those compounds which were not disclosed in the examples. Therefore, this invention may be granted patent only when the applicant makes restricted amendment to the patent application so that the application may cover compounds having R-receptor activation ability which a person having ordinary skill in the art can obtain based on specifically disclosed compounds, patent specifications and general technical knowledge at the time of application. The same decision will be applied to the use invention.