

The EPO Rejects Reach-Through Claims: Chemical Compounds, Defined Only by a New Function, Lack Sufficiency

The European Patent Office (“EPO”) recently refused a European patent application to compounds defined solely by a function that the inventors had discovered. The EPO refused the application because the claimed invention was insufficiently disclosed.

The Patent Application

The application related to medical stimulation of an enzyme. There were known compounds which stimulated the enzyme through the heme group. The application was based on the discovery of some compounds which stimulated the enzyme independently of the heme group. It claimed protection for all compounds which had this new effect. The application described a screening method to test whether any given compound had this effect.

The Decision

The Technical Board of Appeal (“TBA”) confirmed that a claim to the compounds defined solely by their function covered not only the specific compounds described but also any compound with the same activity that might be discovered in the future.

The TBA decided that, because the application gave no guidance on how to select compounds with the effect, the only way to find all claimed compounds was by trial-and-error. It concluded that such a claim is an invitation to perform research, rather than the definition of an invention, placing an “undue burden” to carry out the invention as claimed, and so is insufficiently disclosed.

The TBA concluded that if an application claims compounds by a desired effect, without additional structural limitation, the application unallowably covers future inventions. Such a claim is known as a “reach-through claim”. It observed that, “Patent protection is limited to applicant’s actual contribution to the art, i.e. their actual invention.”

Practical Implications

In practice, an applicant cannot claim all substances with a specific newly-discovered effect, even if the application teaches a test for that effect.

If an application attempts to define substances solely by their function, without any structural limitation, the application runs the risk of being found insufficient. When the application rests on a newly-discovered effect of substances, its definition of them must include a reasonable structural generalization of the specific substances that the application shows to have that effect.

The TBA decision is [T 1063/06](#),