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## (54) Title of the invention: A METHOD FOR ESTIMATING ENZYME ACTIVITY BY COMBINING NATIVE POLYACRYLAMIDE GEL ELECTROPHORESIS WITH ZYMOGRAPHY

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## (57) Abstract:

ABSTRACT: Title: A Method for Estimating Enzyme Activity by Combining Native Polyacrylamide Gel Electrophoresis with Zymography The present disclosure proposes a method for estimating enzyme activity by combining native polyacrylamide gel electrophoresis with zymography. The method helps in rapid detection of enzyme activity of various proteinases without lengthy procedures of enzyme extraction, purification and evaluation. The method detects active molecules without any destruction to the protein structure. The method improves detection capabilities of malfunctioning enzymes in clinical settings and enhances the pace of biomedical research. The method uses native PAGE (polyacrylamide gel electrophoresis) technique to separate proteins based on their native conformation, which includes their size, charge, and shape. The method is highly beneficial for testing the unpurified samples such as blood-plasma.

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