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(54) **ENZYME WITH PEROXIDASE ACTIVITY ISOLATED FROM ARTICHOKE (CYNARA SCOLYMUS, L.), PROCESS FOR ISOLATION AND PURIFICATION AND APPLICATIONS**

(57) The enzyme with peroxidase activity which has been isolated from artichoke (*Cynara scolymus*, L) is a glycosilated protein which can be obtained through a process that comprises the extraction of said enzyme with peroxidase activity from artichoke tissues, the separation of said enzyme from other enzymes with oxidase activity and which may be present in the vegetable material and, optionally, the partial or homogeneous purifi-

cation of said enzyme with peroxidase activity. Said enzyme can be used in the oxidation of reductor substrates, as clinical or diagnostic reagent, as marker enzyme in immunoassays, for the preparation of biosensors, as biocatalyst for the production of biotechnological and industrial products and in environmental applications.

EP 1 336 653 A1

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC 7 C12N 9/08, 9/02		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC 7 C12N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
CIBEPAT, HCAPLUS, MEDLINE, BIOSIS, EMBASE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KANEL, M. Y.; GHAZY, A.M. Peroxidases of Cynara scolymus (global artichoke) leaves. Purification and properties 1973 Acta Biol. Med. Ger., 31 (1), 39-49	1
A		10-40
Y		41-47
Y	EP 517327 A2 (EASTMAN KODAK COMPANY) 09.12.1992	42-43
Y	US 5508180 (JOHNSON ET AL) 16.04.1996	41,44
Y	EP 744466 A2 (CO.R.I.AL. SCPA) 27-11-1996	42,47
Y	US 5178762 (POKORA ET AL) 12.01.1993	46
Y	WO 9855629 A2 (INDIANA CROP IMPROVEMENT ASSOCIATION) 10.12.1998	45
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
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