

#### SUPPLEMENTARY EUROPEAN SEARCH **REPORT**

Application number: EP 16 83 99 58

Classification of the application (IPC): A01N 63/04, A01N 25/10, B08B 9/027, A01G 25/00 Technical fields searched (IPC): A01N, A01G, B08B

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim			
А	WO 9716381 A1 (NEOZYME INTERNATIONAL INC [US]) 09 May 1997 (1997-05-09)	1, 4-15			
	* abstract *  * page 2, lines 13-18 *				
А	WO 2013180756 A1 (NEOZYME INTERNATIONAL INC [US]; DALE PARKER [US] ET AL.) 05 December 2013 (2013-12-05)	1, 4-15			
	* page 1, lines 1-4 *  * page 4, line 18 - page 6, line 10 *				
	* page 11, lines 7-17 *				
	* page 17, lines 9-15 *				
Α	WO 9728092 A1 (NEOZYME INTERNATIONAL INC [US]) 07 August 1997 (1997-08-07)	1, 4-15			
	* abstract *  * page 2, lines 20-29 *				
	* examples 2-3 *				
	* page 9; table III *				
А	MOHAMMAD R. CHAICHI ET AL: "Surfactant Application on Yield and Irrigation Water Use Efficiency in Corn under Limited Irrigation" <i>CROP SCIENCE</i> , 01 January 2015 (2015-01-01), vol. 55, no. 1, DOI: 10.2135/cropsci2013.10.0706, page 386, XP055592626	1, 4-15			
	* abstract *  * page 388, left-hand column, lines 14-18 *				
	* page 393, left-hand column, lines 8-28 *				
Α	WO 03031536 A1 (AQUATROL CORP [US]) 17 April 2003 (2003-04-17)  * page 1, lines 5-11 *  * page 3, lines 1-21 *	1, 4-15			

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich

Date of completion of the search 03 June 2019

Examiner Hateley, Martin © 2019 org.epo.publication.KlausBaumeister xsl stylesheet v0.9.4SRnfp

## **CATEGORY OF CITED DOCUMENTS**

- X: particularly relefant if taken alone
  Y: particularly relefant if
  - particularly relefant if combined with another document of the same category
- technological background O: non-written disclosure
- &: member of the same patent family, corresponding document
- intermediate document
- theory or principle underlying the invention earlier patent document, but published on, or after the filing date
- document cited in the application
- L: document cited for other reasons

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DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim			
Х	EP 0375615 A2 (CIBA GEIGY AG [CH]) 27 June 1990 (1990-06-27) * abstract * * page 1, line 1 - page 4, line 55; claim 1 *	1, 4-15			
X	US 8821646 B1 (MILLER JOHN C [US] ET AL) 02 September 2014 (2014-09-02) * column 12, line 48 - column 3, line 61 *	1, 4-15			
Х	US 2007257127 A1 (IVERSON CARL E [US]) 08 November 2007 (2007-11-08)  * abstract *  * paragraphs [0001], [0004] - [0006] *	1, 4-15			

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Date of completion of the search Examiner Place of search Munich 03 June 2019 Hateley, Martin

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## LACK OF UNITIY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1(completely); 4-15(partially)

A method of maintaining or improving the efficiency of an irrigation system comprising applying an effective amount of a plant agent composition comprising a treated, fermented microbial supernatant and one or more non-ionic surfactants to one or more pipes in a pipeline network of the irrigation system, wherein the application of the plant agent composition results in adequate removal of one or more components blocking one or more pipeline networks of an irrigation system

2. claims: 2(completely); 4-15(partially)

A method of controlling a causal agent of a plant disease, comprising applying an effective amount of a plant agent composition comprising a treated, fermented microbial supernatant and one or more non-ionic surfactants to one or more plants infested with a causal agent and/or applying an effective amount of a plant agent composition to one or more locations in a manner where the causal agent will be exposed to the plant agent composition, wherein the application of the plant agent composition results in an adverse effect on the causal agent sought to be controlled

3. claims: 3(completely); 4-15(partially)

A method of increasing plant growth and/or crop production comprising applying an effective amount of a plant agent composition comprising a treated, fermented microbial supernatant and one or more non-ionic surfactants to one or more plants and/or applying an effective amount of a plant agent composition to one or more locations where a plant agent composition will be exposed to the one or more plants, wherein the application of the plant agent composition results in improved absorption by root hairs, improve xylem sap flow through xylem and improved photosynthate flow in phloem, increased uptake of water, minerals and other nutrients from the soil, increase the capillary action and/or hydrostatic pressure in xylem, and/or increased synthesis of compounds and energy and/or disruption of one or more components blocking xylem sap flow and/or photosynthate flow

None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims: 1(completely); 4-15(partially)

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich

Date of completion of the search 03 June 2019

Examiner
Hateley, Martin

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## ANNEX TO SUPPLEMENTARY EUROPEAN **SEARCH REPORT**

Application number: EP 16 83 99 58

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 03-06-2019

The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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			CA ES	2567022 A1 2315167 A1	20-10-2007 16-03-2009
			NL	1033661 C2	09-07-2008
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