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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:  
**17737949.2 / 3 475 411**

(54) **METHODS AND COMPOSITIONS FOR SPRAY DRYING GRAM-NEGATIVE BACTERIA**

(57) Methods for spray drying gram negative bacteria are provided. Such spray drying methods are performed under conditions that allow for the spray dried composition to retain the biological activity of interest of the gram-negative bacteria. Further provided are compositions comprising a spray dried gram-negative bacteria, where the spray dried formulation comprises at least 10<sup>5</sup> CFU/gram of said gram-negative bacteria. The gram-negative bacteria employed in the various methods and compositions can comprise a biological activity of interest which, in specific embodiments, controls one or

more pathogens that cause plant disease and/or improve at least one agronomic trait of interest. The spray dried formulation can be used as an inoculant for plants. Methods for growing a plant susceptible to plant disease and methods and compositions for controlling plant disease are also provided. Further provided are methods and compositions of increasing disease resistance in plants. Methods and compositions for improving plant health and/or improving at least one agronomic trait of interest are also provided.

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	<p>US 2015/327557 A1 (HAMMER PHILIP E [US] ET AL) 19 November 2015 (2015-11-19)                      * the whole document *                      * in particular [0139]-[0143], examples 7-10 *</p>	1-13	<p>TECHNICAL FIELDS SEARCHED (IPC)</p> <p>C12N                      A01N</p>
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		19 December 2023	Dumont, Elisabeth
CATEGORY OF CITED DOCUMENTS		<p>T : theory or principle underlying the invention                      E : earlier patent document, but published on, or after the filing date                      D : document cited in the application                      L : document cited for other reasons                      .....                      &amp; : member of the same patent family, corresponding document</p>	
<p>X : particularly relevant if taken alone                      Y : particularly relevant if combined with another document of the same category                      A : technological background                      O : non-written disclosure                      P : intermediate document</p>			

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The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>19 December 2023</b>	Examiner <b>Dumont, Elisabeth</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p>		<p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>	

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ANNEX TO THE EUROPEAN SEARCH REPORT  
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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