

Title (en)  
DEVICE AND A METHOD FOR THE DETECTION AND AMPLIFICATION OF A SIGNAL

Title (de)  
EINRICHTUNG UND VERFAHREN ZUR DETEKTION UND VERSTÄRKUNG EINES SIGNALS

Title (fr)  
DISPOSITIF ET PROCÉDÉ DE DÉTECTION ET D'AMPLIFICATION D'UN SIGNAL

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Application  
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Abstract (en)  
[origin: WO2009000918A1] The invention relates to a device and a method for the detection and amplification of a primary signal, utilizing an intracellular communication system, and the use thereof for the detection of substances such as phosphorus, sulfur, nitrogen, hormones, metabolic intermediates, fermentation products, and so forth. The device according to the invention for the detection and amplification of a primary signal contains cells of a first type for which a gene, which is responsible for the synthesis of a signal molecule, is under the control of a promoter which is regulated by the primary signal, and cells of a second type for which a specific gene is under the control of a promoter which is regulated by the separated signal molecule, in such a way that the secretion of the signal molecule is induced by a primary signal taken up by a cell of the first type, and the primary signal is amplified by the cells of the second type by the expression of the specific gene under the control of the signal molecule.

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