Expression of Interest Proposal for Transfer of Technology



BRIC- National Institute of Plant Genome Research Aruna Asaf Ali Marg, New Delhi- 110067 New Delhi, India.

EXPRESSION OF INTEREST FOR LICENSING 'SYSTEM FOR DELAYING RIPENING OF AGRICULTURE PRODUCE'

The National Institute of Plant Genome Research (NIPGR) is an autonomous institution under the Biotechnology Research and Innovation Council (BRIC) and is aided by the Department of Biotechnology, Government of India. In the twenty-six years of its existence, NIPGR has risen to be a premier national and global centre for plant genomics. Our vision is to evolve into one of the world's leading resource institutes for material, knowledge and technologies in the areas of functional, structural, evolutionary and applied plant sciences, including primary and secondary agriculture. NIPGR's major research activity has been aligned with Climate Resilient Agriculture as described in the BioE3 policy. NIPGR also aims to deliver outcome of its research to real world applications which has societal relevance. Post-harvest loss is a major cause for high market price and non-availability of agri-products. To reduce loss, NIPGR has developed a novel and innovative device to enhance shelf life of fruits and vegetables. Patents for this technology 'System for delaying ripening of agriculture produce has been filed in India, EU, USA and PCT. The device can be used for storage of fruits. We are floating Expression of Interest (EOI) for the transfer of this technology. Interested industries and/or startups should furnish the request for non-exclusive license of this technology in the given proforma within 30 days from the date of issue of the **EOI**. The images, patent document and the format for the EOI is attached.

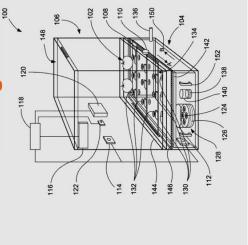
The salient features of the above technology

- 1. The system designed to enhance shelf-life of fruits and vegetables based on specific design where the chamber contains two compartments. Lower compartment where formula source can be placed. The lower tray contains holes on the top to diffuse the formula.
- 2. The formula containing gases enters the upper chamber where a temperature sensor is placed which can sense and communicate to the temperature controller which can adjust temperature between 20-30 degrees.
- 3. The upper chamber processes a mini motor driven propeller which can be powered with solar panel or any power source to circulate the formula.
- 4. The system can be also single chamber where formula can be integrated in a miniature box in a larger system.
- 5. The system can be scalable to store produce ranging from 10kg to 200kg.



System to enhance shelf-life of fruits

and vegetables



Ripening as Indicated in PCT patent System for delaying the process of WO/2021/181403A1







material/wood/recyded plastic and these can be powered with AC/DC/ or The system can be modified as per the requirement of user. They can be made in different sizes and can be scaleup with either polyacrylic with the help of solar panels

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- (74) Agent: LAKSHMIKUMARAN, Malathi et al.; B6/10, Safdarjung Enclave, New Delhi 110029 (IN).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,

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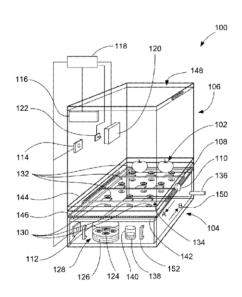
Declarations under Rule 4.17:

of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- with amended claims and statement (Art. 19(1))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: SYSTEM FOR DELAYING RIPENING OF AGRICULTURAL PRODUCES



(57) Abstract: The present subject matter relates to a system (100, 200, 300) for delaying ripening process of agricultural produces (102, 202). The system (100, 200, 300) includes a first air-tight chamber (104, 204, 302) to hold a plant material (124, 228) in contact with a nitrite source (126, 230) and to receive a hypoxia-inducing source to create a hypoxic condition in first air-tight chamber (104, 204, 302) to enable production of nitric oxide by plant material (124, 228). A second air-tight chamber (106, 206) holds agricultural produce (102, 202). The second air-tight chamber (106, 206) comprises a first inlet (132, 236) connected to first outlet (130, 234) of first air-tight chamber (104, 204, 302) to expose agricultural produce (102, 202) to nitric oxide received from first air-tight chamber (104, 204, 302) for delaying ripening of agricultural produce (102, 202).



FIG. 1

Instruction to Applicants

- 1. The applicant should clearly mention the name of the technology/product for which the EOI proposal is being submitted.
- 2. The background information on the company.
- 3. The applicant should submit the EOI proposal within the time stipulated for the same.
- 4. The EOI proposal should be submitted in two parts (i) General information (ii) Financial offer. The technical information may specify details and strength of the applicant as specified in the Annexure-1, the financial offer may be submitted as per the Annexure-2. The Technical and Financial information may be separately marked and submitted in separate sealed cover.
- 5. All cost associated with the submission of EOI proposal shall be borne by the applicant.

Other terms and conditions

- 1. The Provider will be free to use the 'Technology' provided to the Receiver, for any purpose without any kind of restriction.
- 2. The 'Technology' provided or its part(s) shall not be distributed or transferred to any third party/individual, without prior written approval of the Provider.
- 3. The Receiver will hold the entire responsibility for the quarantine/SPS clearances, of the 'Technology' as specified herein above, if required. The Receiver shall abide by the statutory guidelines and shall not hold Provider responsible for any identity/quality/viability/quarantine/biosafety related or any other related regulatory matter/hazard that may be attributable to the 'Technology' as specified in this Expression of Interest.
- 4. To defend and indemnify the Provider from all claims and damages/recoveries, arising from the use, storage or handling of the said 'Technology', will be the responsibility of the Receiver.
- 5. The 'Technology' is provided without WARRANTY OF ANY SORT, EXPRESSED OR IMPLIED, and INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE.
- 6. This Expression of Interest is non-assignable. The Receiver agrees to abide by any other conditions that may be set in and conveyed to them from the Provider in respect of this 'Technology' access/exchange or any Law, Rules, Regulation, etc. enacted by Government of India from time to time.
- 7. In case of any dispute between the parties to this Expression of Interest, the dispute shall be referred to the Sole Arbitrator to be appointed by the Director,

- NIPGR. The decision of the Sole Arbitrator shall be final and binding on the Parties. The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996. The Arbitration proceedings shall be at New Delhi.
- **8.** Director, NIPGR reserves the right to accept or reject the offer of EOI. The decision of the Director, NIPGR is final.
- 9. The EOI cover must be marked "EOI for transfer of Technology, SYSTEM FOR DELAYING RIPENING OF AGRICULTURE PRODUCE" and shall be addressed to:

The Director
BRIC-National Institute of Plant Genome Research (NIPGR)
Aruna Asaf Ali Marg,
New Delhi - 110067 (India).

APPLICANT PROFILE FOR TECHNOLOGY TRANSFER

Sr.	Particulars	
No.		
1)	Name of the firm:	
	Address:	
	Telephone No:	
	Fax:	
	Email:	
2)	Details of Incorporation, Location of operation	
	including branches / subsidiaries	
3)	Type of Organization	
	a) Public Sector/ Limited/Private	
	Limited/ Partnership/ Proprietary/	
	Society/ Start up/ Any other	
	b) Whether 'Foreign Equity	
	Participation (Please give name of	
	foreign equity participant and	
	percentage thereof)	
	c) Names of Directors of the Board/	
	Proprietors	
	d) Name and address of NRI(s), if any	
4)	Core area of expertise of the firm	
5)	Details of Manufacturing, Marketing Licenses,	
'	Registrations owned by the Company (Eg.	
	GST, PAN and TAN, Export License etc.)	
	(Please provide copies of legal documents)	
6)	Indicate choice(s) of Geographical Rights	
,	jurisdiction excluding India, intended to	
	commercialise the technology	
	(Please Specify the name of the countries of	
	interest for manufacturing marketing etc.)	
7)	List of products/technologies worked with	
	as regular activity in last three years. Give	
	the list of products/technologies with	
	general specifications and the customers.	
8)	Whether the Organization has been	Yes/No
	blacklisted by any Central /State	
	Government Department Organization	
9)	Any other major details - please specify	
10)	Name of Contact Person	
_	Telephone no	
	Email ID	

Declaration

I confirm that the information given above is true and correct.

Signature

Name and designation:

Place: Date:

Seal

NOT TO BE ENCLOSED WITH TECHNICAL BID

Annexure 2

