

22nd November 2017

To
Manager (CRD)
Bombay Stock Exchange Ltd. (BSE)
P.J. Towers, Dalal Street,
Mumbai 400 001

Manager (CRD)
National Stock Exchange of India Ltd. (NSE)
Exchange Plaza, Bandra Kurla Complex
Bandra (E), Mumbai - 400051

Ref: Script Code- 516064
Sub. : Grant of Patent

Script Code- ARROWGREEN

Dear Sir,

We would like to inform you that the Company has received Patent Rights from **United States of America** Patent Authorities for their patent titled "**Method of Manufacturing Embedded Water Soluble film Carrier**". The Patent ID Number is **9744695**. A note and a certificate on the same is attached.

Thanking you,

Yours faithfully,

For **Arrow Greentech Limited**

Poonam Bansal
Poonam Bansal
Company Secretary



ARROW GREENTECH LTD.

Solitaire Corporate Park, Building No.3, Unit No.372, 7th Floor, Guru Hargovindji Marg, Chakala, Andheri (East), Mumbai - 400 093, Maharashtra, INDIA.
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CIN No. : L21010MH1992PLC069281

**Announcement of Grant of Method of
Manufacturing Embedded Water Soluble film Carrier in United States of America**

Arrow Greentech Limited (AGTL) has received a grant for patent titled "Method of Manufacturing Embedded Water Soluble film Carrier" Patent No. 9744695 dated 29th August 2017, from United States of America Patent Office. Certificate is attached.

IP Cell has been informed that it's a break-through technology in Health care, Pharma, Agrochemicals and Hygiene through our sustained R&D efforts. This invention relates to a water-soluble film (WSF) system with embedded/entrapped active ingredients. More particularly, the invention relates to a WSF system with actives embedded/entrapped therein such as to provide precise and desired release of Pharmaceutical Actives there from and its method of manufacturing for diverse applications. To fully explore the potential of various health and hygiene patents.

The US market is the worlds most important market. Application of WSF technologies in pharma and other sectors gives our company's patent and products access to the market place. It is a cutting edge invention that will take company in to new geographical boundaries.

It shall be Arrow Greentech Limited's on-going endeavour to commercialise these patents appropriately.

Safe Harbor Statement

This announcement contains forward-looking statements. Arrow may also make forward-looking statements in our periodic reports to the Stock Exchanges as per prevalent rules and in its annual report to shareholders, in its proxy statements, in its offering circulars and prospectuses, in press releases and other written materials and in oral statements made by its officers, directors or employees, to third parties. Arrow assumes no obligation to update the forward-looking statements in this release and elsewhere. Statements that are not historical facts, including statements about our beliefs and expectations, are forward-looking statements. Forward-looking statements involve inherent risks and uncertainties. A number of important factors could cause actual results to differ materially from those contained in any forward-looking statement.



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CIN No. : L21010MH1992PLC069281

The
United
States
of
America



**The Director of the United States
Patent and Trademark Office**

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Joseph Matal

*Performing the Functions and Duties of the
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office*



US009744695B2

(12) **United States Patent**
Patel et al.

(10) **Patent No.:** **US 9,744,695 B2**
(45) **Date of Patent:** **Aug. 29, 2017**

(54) **METHOD OF MANUFACTURING
EMBEDDED WATER SOLUBLE FILM
CARRIER**

(75) **Inventors:** **Shilpan Pravinchandra Patel**, Mumbai
(IN); **Atikullah Hussainmiya Saiyad**,
Gujarat (IN)

(73) **Assignee:** **Arrow Greentech Limited**, Guru
Hargovindji Marg, Chakala, Andheri
(E), Mumbai, Maharashtra (IN)

(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** **12/905,035**

(22) **Filed:** **Oct. 14, 2010**

(65) **Prior Publication Data**

US 2011/0039985 A1 Feb. 17, 2011

Related U.S. Application Data

(62) Division of application No. 10/491,951, filed as
application No. PCT/IN02/00202 on Oct. 7, 2002,
now abandoned.

(30) **Foreign Application Priority Data**

Oct. 9, 2001 (IN) 443/MUM/2001

(51) **Int. Cl.**
B29C 39/14 (2006.01)
B29C 39/20 (2006.01)
B29C 41/24 (2006.01)
C08J 5/18 (2006.01)

(Continued)

(52) **U.S. Cl.**
CPC **B29C 39/14** (2013.01); **B29C 39/203**
(2013.01); **B29C 41/24** (2013.01); **C08J 5/18**
(2013.01);

(Continued)

(58) **Field of Classification Search**

CPC **B29C 41/28**
See application file for complete search history.

(56) **References Cited**

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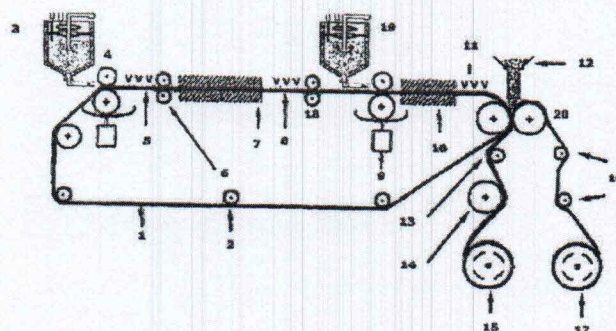
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& Lucchesi, LC

(57) **ABSTRACT**

This invention relates to a water-soluble film (WSF) system
with embedded/entrapped water-soluble films (WSF). More
particularly, the invention relates to a WSF system with
actives embedded/entrapped therein such as to provide pre-
cise and desired release of actives there from and its method
of manufacturing for diverse applications, in which a variety
of substances such as detergents, enzymes, softeners, per-
fumes, pesticides, fungicides, active ingredients, dyes, pig-
ments, hazardous chemicals, active agents for cleaning
laundry, dishes, floorings, walls, furniture, fluffs, pulp, etc.,
and the like can be so embedded/entrapped for such purpose.
The invention further discloses novel online and offline
process for the manufacture of such multi-layered WSF with
or without liners and of desired shapes to selectively entrap
interacting/non-interacting materials and their combina-
tions. The process also provides options for the use of a wide
range of raw materials, liners such as paper, film, foil, fabric,
etc.

31 Claims, 4 Drawing Sheets



**Full Diagram - All Methods
(Casting on Conveyor)**