



ORIGINAL हम सं/ Serial No. : 18529



## पेटेंट कार्यालय, भारत सरकार

The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र ि Certificate of Registration of Design

डिजाइन सं. / Design No. : 426872-001

तारीख / Date : 13/08/2024

पारस्परिकता तारीख / Reciprocity Date\*

देश / Country

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो DAMPING SYSTEM FOR AN OIL RIG से संबंधित है, का पंजीकरण, श्रेणी 15-99 में Indian Institute Of Technology Madras (Iit Madras) के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 15-99 in respect of the application of such design to DAMPING SYSTEM FOR AN OIL RIG in the name of Indian Institute Of Technology Madras (Iit Madras).

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन प्रावधानों के अनुसरण में। In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि

27/11/2024



उत्तात भी यंदित

महानियंत्रक पेटेंट, डिजाइन और व्यापार चिह्न Controller General of Patents, Designs and Trade Mark

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The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



# TTO - IPM Cell



# Industrial Consultancy & Sponsored Research (IC&SR)

## DAMPING SYSTEM FOR AN OIL RIG **IITM Technology Available for Licensing**

## INTELLECTUAL PROPERTY (Design)

IITM IDF Ref. 3036

**Design No: IN 426872-001 (Granted)** 

Class 15-99

## TECHNOLOGY /IP CATEGORY/ MARKET

**Design:** Damping system for an oil rig

**Industry:** Power Generation

**Application:** Liquid Natural Gas (LNG)

Market: The global market size was valued at valued at USD 8.94 billion in 2023 and will reach USD 16.44 billion, with a CAGR

of 7.91% by 2031.

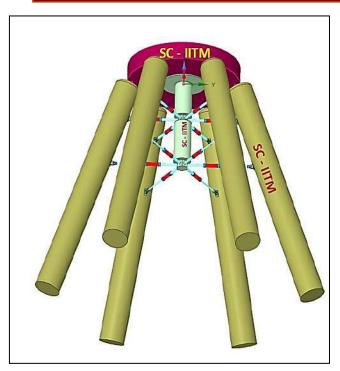
#### Research Lab

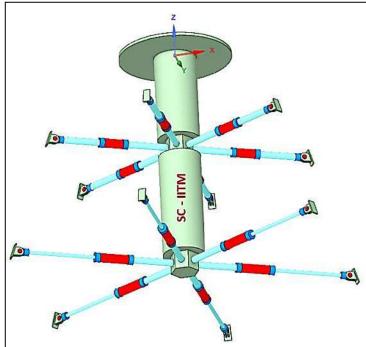
Prof. Srinivasan Chandrasekaran, Shyba Arakkan, Dept. of Ocean Engineering

## **DESIGN**

- > Present Design describes the aesthetic view of Damping system for an oil rig to response control of Buoyant Leg Storage and Regasification Platforms for the safe storage, regasification and processing of Liquid Natural Gas (LNG) under rough sea states.
- Further, different shape & configuration of present design is illustrated herein below.

### **IMAGES**





**Perspective** view **BLSRP** with of response control mechanism

Perspective view of the response control mechanism

#### **CONTACT US**

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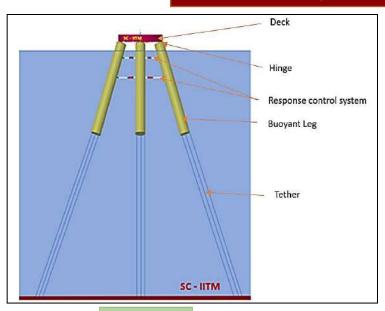
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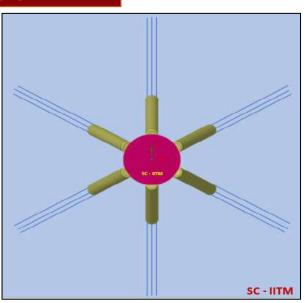


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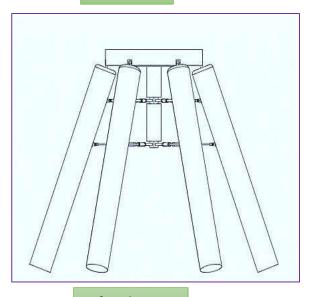
## DAMPING SYSTEM FOR AN OIL RIG **IITM Technology Available for Licensing**

## ADDITIONAL IMAGES



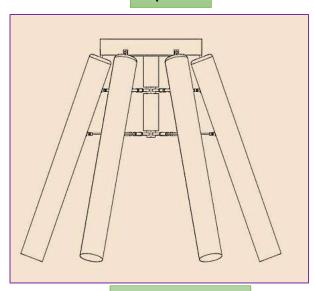


#### **Front View**



**Left Side View** 

**Top View** 



**Right Side View** 

#### **Advantages**

> The design introduces a control system for the Buoyant Leg Storage and Regasification Platform (BLSRP) using a spring assembly and a Magneto-Rheological damper. The spring connects all buoyant legs, while the damper controls their movement by changing viscosity with a magnetic field.

## **CONTACT US**

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