# पेटेंट कार्यालय
# शासकीय जर्नल

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## INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

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(57) Abstract :
The present invention provides an adjustable radiation brassiere for carcinoma of breast patients to provide better simulation compared to conventional techniques and adjust the shape of both breasts according to the treatment planning requirements. The brassiere features a supportive base structure, adjustable breast cups, and strap mechanisms tailored to conform to patient-specific anatomical requirements. It incorporates radiation-shielding materials to reduce unintended exposure to the contralateral breast and position markers compatible with imaging systems for accurate alignment. The design is compatible with advanced radiotherapy techniques, such as deep inspiration breath hold (DIBH) and respiratory gating, with optional integration of breathing pattern trackers. Additionally, the brassiere allows for modular attachments, including neck and arm supports, to ensure upper body immobilization. By providing a comfortable, patient-centric solution, the invention addresses challenges in breast movement, thoracic breathing motion, and patient flexibility, ensuring consistent target volume alignment and effective radiation delivery. Figure 1

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