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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 01<sup>st</sup> 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.

**( Om Prakash Gupta )**  
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(57) Abstract :

ABSTRACT In one aspect, a smart lens array system comprising, a shaped dielectric lens, plurality of array elements, plurality of phase shifters, an adder circuit, an analog to digital converter and a signal processing module. The shaped dielectric lens is capable of propagating an incoming radio wave and the incoming radio wave is incident at a first surface and refracted towards a second surface of the shaped dielectric lens. The array elements capture the radio wave, propagated from second surface of shaped dielectric lens. The phase shifters provide relative phase shift values for subject radio wave and the adder circuit adds the phase shifted values. The analog to digital converter converts the subject phase shifted signals of radio wave to a digital signal and further transmits the signal to a signal processing module. The signal processing module estimates a virtual direction of arrival for the digital signal and further determines an actual angle of arrival for the incident radio wave.

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