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(71) Name of Applicant :

1) Akhlesh Kumari

Address of Applicant : Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, India, 244102 -----

2) Dr. Sushil Kumar

Name of Applicant : NA

Address of Applicant : NA

(72) Name of Inventor :

1) Akhlesh Kumari

Address of Applicant : Assistant Professor, School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh, India, 244102 -----

2) Dr. Sushil Kumar

Address of Applicant : Professor & Director School of Pharmaceutical Sciences, IFTM University, Moradabad, Uttar Pradesh Moradabad -----

(57) Abstract :

The present invention belongs to the field of pharmaceutical science. More, particularly the invention pertains to synthesis novel compound novel compound 2-(2,3-diphenyl-1H-indol-1-yl)benzothiazole. The novel process involved charging a Schleck tube equipped with a stir-bar with N-phenylbenzo[d]thiazol-2-amine (0.05 g, 0.22mmol), diphenylacetylene (0.039 g, 0.22 mmol), & DCE as a solvent, purging the reaction tube with argon, adding [Ru(p-cymene)Cl<sub>2</sub>]<sub>2</sub> (0.007 g, 0.01mmol), AgSbF<sub>6</sub> (0.015 g, 0.04 mmol), Cu(OAc)<sub>2</sub> (0.04 g, 0.22mmol) to the reaction mixture after 5-10 min followed by argon purging, stirring the mixture at 120°C for 12 hrs, cooling the mixture at room temperature, passing the reaction mixture through celite bed and concentrated under reduced pressure and purifying the mixture by silica gel chromatography (EtOAc: Hexane) to yield the desired product.

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