(19) INDIA

(22) Date of filing of Application :16/08/2023 (43) Publication Date: 15/09/2023

(54) Title of the invention: SCHIFF BASES OF 1H-INDOLE-2,3-DIONE DERIVATIVES: SYNTHESIS AND STUDIES OF NOVEL ANTI-INFLAMMATORY AND ANTIOXIDANTS

:G01N0030900000, A61P0009120000, (51) International C07D0209380000, A61P0035000000, classification

C07D0471040000

(86) International :NA Application No :NA Filing Date (87) International

: NA Publication No

(61) Patent of Addition :NA to Application Number :NA Filing Date

(62) Divisional to :NA **Application Number** :NA Filing Date

(71)Name of Applicant: 1)Shobhit Shrivastava

Address of Applicant : Faculty of Pharmaceutical Science, Jayoti Vidyapeeth Women's University, Vedaant Gyan Valley, Village-Jharna, Mahala Jobner Link Road, Jaipur Ajmer Express Way, NH-8, Jaipur-303122, Rajasthan, India ------

2)Prof. (Dr.) Dharmendra Ahuja

Name of Applicant: NA Address of Applicant : NA (72)Name of Inventor: 1)Shobhit Shrivastava

Address of Applicant : Faculty of Pharmaceutical Science, Jayoti Vidyapeeth Women's University, Vedaant Gyan Valley, Village-Jharna, Mahala Jobner Link Road, Jaipur Ajmer Express Way, NH-8, Jaipur-303122, Rajasthan, India -----

2)Prof. (Dr.) Dharmendra Ahuja

Address of Applicant :Dean and Principal, Faculty of Pharmaceutical Science, Jayoti Vidyapeeth Women's University, Vedaant Gyan Valley, Village-Jharna, Mahala Jobner Link Road, Jaipur Ajmer Express Way, NH-8, Jaipur-303122, Rajasthan, India -----

(57) Abstract:

The present invention relates to a method for the synthesis of Schiff bases derived from N2-benzylidenepyridine-2,6-Diamine and Isatin/5-Substituted Isatin, yielding novel compounds with potential medicinal applications. N2-benzylidenepyridine-2,6-Diamine is prepared through refluxing 2,6-diaminopyridine and benzaldehyde in ethanol, while Isatin/5-Substituted Isatin is obtained using the Sandmeyer method. Subsequent reactions involve equimolar mixing of the aforementioned components in ethanol with glacial acetic acid. The solid obtained post-reaction is filtered, washed, dried, and re-crystallized. Thin-Layer Chromatography (TLC) monitors the reactions, and iodine vapor visualization confirms reaction spots. The synthesized Schiff bases exhibit potential anti-inflammatory and antioxidant properties, showing promise for further pharmaceutical exploration. This method provides a systematic approach to generate novel compounds, contributing to advancements in medicinal chemistry and therapeutic development

No. of Pages: 12 No. of Claims: 6