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(71) Applicant: **JUBILANT EPIPAD LLC** [US/US]; 790 Township Line Road, Suite 325, Yardley, PA, Pennsylvania 19067 (US).

(72) Inventor; and
(71) Applicant: **RAJAGOPAL, Sridharan** [IN/IN]; Jubilant Therapeutics India Ltd, # 96, Industrial Suburb, 2nd Stage, Industrial Area, Yeshwanthpur, Karnataka, Bangalore 560022 (IN).

(72) Inventors: **SADHU, Naveen**; Jubilant Therapeutics India Ltd, # 96, Industrial Suburb, 2nd Stage, Industrial Area, Yeshwanthpur, Karnataka, Bangalore 560022 (IN). **GAJENDRAN, Chandru**; Jubilant Therapeutics India Ltd, # 96, Industrial Suburb, 2nd Stage, Industrial Area, Yeshwanthpur, Karnataka, Bangalore 560022 (IN).

(74) Agent: **LAKSHMIKUMARAN, Malathi** et al.; B6/10, Safdarjung Enclave, New Delhi 110029 (IN).

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(54) **Title:** POLYHETEROCYCLIC COMPOUNDS AS PEPTIDYL ARGININE DEIMINASE 4 (PAD4) INHIBITORS

(57) **Abstract:** The present disclosure provides polyheterocyclic compounds of Formula (I) that are PAD4 inhibitors. The present disclosure also provides a process for preparing the compounds of Formula (I). The compounds of the present disclosure are efficient PAD inhibitors and are useful in treating diseases that are mediated by PAD. The compounds of the present disclosure are PAD4 inhibitors and are all capable of inhibiting PAD4 enzyme. The compounds of the present disclosure either alone or in combination with other clinically relevant agent inhibits PAD4 enzyme.