(43) Publication Date: 10/01/2025

(22) Date of filing of Application :31/12/2024

(54) Title of the invention: PHARMACEUTICAL COMPOSITION OF ORANGE PEEL EXTRACT FOR CALCIUM OXALATE STONE INHIBITION

## :A61K0009200000, A61K0036752000, A61K0047120000,

(51) International classification A61P0013040000, H01L0023495000 (86) International Application No :NA

Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date

(62) Divisional to Application Number :NA Filing Date

1)Chitkara University

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla,

Rajpura, Punjab - 140401, India Rajpura -

2)Chitkara Innovation Incubator Foundation

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

1)Dr. Amit Kumar

Allin Kulinar Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -------

3)Pragati Silakari

Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura

4)Deepinder Singh

Apperputer and Address of Applicant: Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------

5)Thakur Gurjeet Singh

Address of Applicant: Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -------

## (57) Abstract :

A composition for managing urolithiasis includes a standardized orange peel extract (OPE) formulated as a solid tablet. The OPE is prepared, phytochemically analyzed, and standardized based on total phenol content (TPC) and total flavonoid content (TFC) to ensure consistent bioactive composition. The efficacy of the standardized OPE against calcium oxalate (CaOx) crystal formation is evaluated using a series of in vitro assays, demonstrating superior inhibition at specific concentrations compared to standard treatments. The solid tablet comprises specific amounts of standardized OPE, microcrystalline cellulose, lactose monohydrate, pregelatinized starch, crospovidone, magnesium stearate, and colloidal silicon dioxide.

No. of Pages: 12 No. of Claims: 10