

List of IPRs

National Utility Patents

1. **Putta Ravi**, D Bhaskar, R M Rao, Putta Sreeharshini Published an Indian Patent, “System and Method for Machine Learning-Assisted Automated Pharmaceutical Formulation Optimization and Stability Prediction” 10/07/2026 Journal No. 28/2026 83948.
2. **Putta Ravi**, Aleti Paramesh, K Daniel Published an Indian Patent, “Dual-Release Buccal Film for Chronotherapeutic Pain Management “25/07/2025 Journal No. 30/2025 71340.
3. **Putta Ravi**, Priyanka, Afreen Published an Indian Patent, “Inhalable Dry powders Nano Carriers for Targeted Pulmonary Tuberculosis Treatment 11/07/2025 Journal No. 28/2025 67335.
4. **Putta Ravi**, Shaik wazid, B. Rajanarender Published an Indian Patent, “Smart pH responsive nanocapsules for targeted drug delivery; 11/07/2025 Journal No. 28/2025 67530.
5. Big Data Analytics on Corona Virus Prevention and Control .9th Mar -2021 Applicants: **M.K.Thimmaraju** Application No: **202141014296**.
6. Cloud Computing System For Medical Health Care 12–Feb-2021 Applicants: **M.K.Thimmaraju** Application No: **202111003506**.
7. Composition of Gastroretentive Mucoadhesive Microsphere and Process for Preparation 01/12/2020, Applicant: **Dr. Dalapathi Gugulothu** Application No. **202021052264**.
8. Preparation of Rosuvastatin formulation for treating human oral squamous cell carcinoma, 28-Feb-2017. Applicant: **M.K.Thimmaraju** Application No: **201741006021**.
9. Thermo sensitive or thermo reversible hydrogel formulation for sustained Antimicrobial action 22- Sep-2017 Applicant: **M.K. Thimmaraju** Application No: **201741033739**.
10. Controlled release pharmaceutical solid matrix composition and method of preparation 17/11/2016, Applicants: **Dr N.Raja, Dr.G.Dalapathi, Dr.N.Ragunandan, and Dr. A.Rajendra Prasad Reddy** Application No: 201641039156.
11. Ciprofloxacin Hydrochloride Hydrogel Formulations, 02-Jun 2016 Applicant: **M.K.Thimmaraju** Application No. **201641019319**
12. A Pharmaceutical composition for treating cancer through Nanoemulsions, 21-Dec-2015 Applicant: **M.K. Thimmaraju, A.Rajendra Prasad Reddy**. Application No. **6840/CHE/2015**

National Design Patents

1. **Putta Ravi**, Konduri Raveendra Babu, Patibandla Jahnvi, Karthikeyan Krishnan, Indian Design Patent No: 465599-001, Application date 14/07/2025 “Mucoadhesive Tester” Grant Date 30/10/2025 Journal No. 44/2025. **Grant Received.**
2. Portable Ayurvedic Herbs Extraction Device. 16th June, 2025
Applicants: **Kavitha Perala Application No: 453552-001 Grant Received**
3. **Putta Ravi**, Rajesh Gollapudi, Vangala Lavanya India Design Patent, Appli. No. 405533-001, 23 March 2025, Rotary Impeller for use in forming dry powder pharmaceutical formulation blend. **Grant Received.**
4. Device for extracting Algae anti-cancer Compounds. 27th Dec, 2024
Applicants: **M.K.Thimmaraju Application No: 436785-001 Grant Received**
5. **Putta Ravi**, Sreenivasa Charan, Keerthisikha Palur, India Design Patent, Appli. No. 440204-001, 11 Dec 2024, Tunable Diode Laser Absorption Spectrometer. **Grant Received.**
6. **Putta Ravi**, Ch. Satish, M. Archana India Design Patent, filed Appli. No. 462252-001, 14 June 2024, Advanced Dialysis Machine with Respiratory Support System. **Grant Received.**
7. A Mud soil testing kit. 14th July, 2022
Applicants: **M.K.Thimmaraju Application No: 367686-001 Grant Received.**
8. Smart Medicine Dispenser with Multiple Tablet Organizer. 24th May, 2022
Applicants: **M.K.Thimmaraju Application No: 364664-001 Grant Received.**
9. An Analytical cartridge for testing biological fluids. 15th April, 2022
Applicants: **M.K.Thimmaraju Application No: 362611-001 Grant Received.**

International Patents

I. Australian:

- a. Artificial Intelligence Based Smart Detection of Lung Disease from Chest X-Ray.
Applicants: **M.K.Thimmaraju Application No: 2020104159-Grant Received.**
- b. A novel VLSI based architecture for stroke detection using optimized Resource allocation.
Applicants: **M.K.Thimmaraju Application No: 2021102581-Grant Received.**
- c. Reversible Hydrogel formulation for prolonged Antimicrobial Activity.
Applicants: **M.K.Thimmaraju Application No: 2021104955-Grant Received.**
- d. Enhanced effectiveness of Meloxicam through Hydrogel formulations
Applicants: **M.K.Thimmaraju Application No: 2021104266-Grant Received.**

II. South African:

- a. Novel Stick Proof Semi Glassy Formulation Labels for Enhancing Medication Compliance.
Applicants: **M.K.Thimmaraju Application No: 2021/7578- Grant Received.**
- b. Cloud Based Integration of Healthcare service system.

Applicants: **M.K.Thimmaraju** Application No: 2022/09877 **Grant Received.**

III. German:

- a. A Smart Integrating System for Profiling Patient Medication/Disease History, Patient, Physician, Pharmacist and Industry.

Applicants: **M.K.Thimmaraju** Application No: 2020221049966 -**Grant Received.**

- b. Composition of Antibacterial Lotion containing Lemon grass oil Enriched with Bioactives.

Applicants: **M.K.Thimmaraju** Application No: 202023102783 -**Grant Received**

IV. U.K:

- a. Ear Medication Delivery Device. 28th April 2023,

Applicants: **M.K.Thimmaraju** Application No: 6275842-**Grant Received.**

- b. **Putta Ravi**, Bhargav Erani, UK Design Patent No:6304219, **Grant** Date 15 September 2023, Registration Date 18 August 2023, Laboratory Apparatus for Extracting Phytochemicals from Herbal Plants. **Grant Received.**

- c. **Putta Ravi**, R M Rao, Venkata Ramana , Ch Sruthi UK Design Patent No:6531236, Grant Date 16 June September 2026, Registration Date 8 June 2026, AI Based Medicine ATM Machine. **Grant Received.**

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1. Thermo sensitive or thermo reversible hydrogel formulation for sustained antimicrobial action.

Applicants: **Manish Kumar Thimmaraju**, Dairy no: 3296/2023-CO/L, **Registered.**

2. Ciprofloxacin Hydrochloride Hydrogel Formulation.

Applicants: **Manish Kumar Thimmaraju**, Dairy no: 3301/2023-CO/L, **Registered.**

3. Pharmaceutical Composition for Treating Cancer through Nanoemulsions-

Applicants: **Manish Kumar Thimmaraju**, Dairy no L-134781/2023- **Registered.**

4. Device for Extracting Algae Anti Cancer Compounds.

Applicants: **Manish Kumar Thimmaraju**, Dairy no 35178/2024-CO/L – **Registered.**