

### Details of Patents of SMVDU

S.NO	Category	Year	Application No.	Title	Inventors	Patent Authority	Filing status with Patent Authority	Commercialized (Yes/No)
1.	Patent	2021	202111040974	AGRICULTURAL TOOL	Dr. Sakshi Arora	India	Published (17.03.2023)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
2.	Patent	2020	202011048859	METHODS AND SYSTEMS FOR MONITORING FACE POSTURE	Dr. Manoj Gupta and Dr. Abhishek Gupta	India	Granted (16.11.2023)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
3.	Patent	2017	201711014816	SECTOR BASED ARCHITECTURE DEVICE-TO DEVICE (D2D) COMMUNICATION	Dr. RK Jha, Dr. Pimmy Gandotra, Prof. Sanjeev Jain	India	Granted (22.03.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
4.	Patent	2017	201711014818	POWER OPTIMIZATION WITH LOW COMPLEXITY USING SCALED BEAMFORMING APPROACH	Dr. RK Jha	India	Granted (19.06.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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5.	Patent	2018	201811041582	AN ASSAY FOR TELOMERE LENGTH MEASUREMENT	Dr. Swarkar, Dr. Ekta Rai	India	Published (21.12.2018)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
6.	Patent	2020	202011008419	RECONFIGURABLE FREQUENCY SELECTIVE SURFACE (FSS) WITH DIFFERENT PROPERTIES IN TE & TM MODE FOR STEALTH TECHNOLOGY	Dr. KR Jha, ZA Pandit Zibran	India	Granted (15-05-2025)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
7.	Patent	2023	202311018215	SOLAR SELECTIVE COATING FOR SOLAR ABSORPTION WITH HIGH THERMO-MECHANICAL STABILITY AND MATERIAL OBTAINED THEREOF	Dr. Sahil Thapa, Dr. Yatheshth, Dr. Sanjeev Anand	India	Published (20.09.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
8.	Patent	2018	201811010011	ZONAL BASED GREEN ALGORITHM FOR ENHANCING BATTERY LIFETIME OF USER TERMINALS	Dr. Rakesh K Jha	India	Published (29.03.2019)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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9.	Patent	2023	202311046137	A COLLISION DETECTION AND VICTIM MANAGEMENT METHOD FOR ROAD SAFETY	Insha Altaf, Dr. Ajay Kaul	India	Filed (10.07.2023)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
10.	Patent	2020	202011013150	SMART DIGITAL PEN: SAMARTH IN E-VERIFICATION	Dr. Rakesh Jha, Haneet Kour	India	Published (01.10.2021)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
11.	Patent	2018	201811038186	ERGONOMICALLY DESIGNED MULTITASKING MOP HANDLE	Dr. Sanjay Mohan	India	Granted (07.02.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
12.	Patent	2018	201811031311	CHECK VALVE DRIP-SET	Vikrant Charak	India	Published (07.08.2020)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
13.	Patent	2017	201711014817	POWER OPTIMIZATION USING OPTIMUM NUMBER OF ANTENNA'S AT	Dr. Rakesh Jha	India	Granted (18.03.2025)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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				SMALL CELL ACCESS POINT IN NEXT GENERATION NETWORK				
14.	Patent	2019	201911012449	A NOVEL SYSTEM OF CAPACITOR VOLTAGE BALANCING OF A THREE-PHASE NEUTRAL-POINT CLAMPED BI-DIRECTIONAL RECTIFIER UNDER PERTURBED LOAD AND MAINS SUPPLY CONDITIONS	Dr. Deepak Sharma	India	Granted (21.10.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
15.	Patent	2020	202011052574	REINFORCED ALUMINIUM MATRIX COMPOSITES AND METHOD OF PREPARATION THEREOF	Dr. RK Mishra. Dr. Balbir Singh, Mr. Pawandeep Singh	India	Published (03.06.2022)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
16.	Patent	2019	201911029219	HUMAN IDENTIFICATION IN MULTI-GAIT SCENARIO	Dr. Uday Pratap Singh	India	Published (27.08.2021)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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17.	Patent	2020	202011010352	GREEN SYNTHESIS OF SILVER NANOPARTICLES	Dr. Indu Bhushan	India	Published (17.09.20 21)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
18.	Patent	2020	202011024270	METHOD AND SYSTEM FOR GENERATING A THREE-DIMENSIONAL(3D) FRAMEWORK OF AN OBJECT	Dr. Abhishek Gupta	India	Granted (01.03.20 24)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
19.	Patent	2021	202111010330	REINFORCED ALUMINIUM MATRIX COMPOSITES AND METHOD OF PREPARATION THEREOF	Dr. Abhishek Gupta	India	Published (11.11.20 22)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
20.	Patent	2021	202111022328	A FACE IDENTIFICATION METHOD AND A SYSTEM THEREOF	Mr. Suvajit Lodh Mr. Shubham Mahajan Dr. Amit Kant Pandit	India	Published (28.05.20 21)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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21.	Patent	2021	202111034866	METHOD AND SYSTEM FOR GENERATING A THREE-DIMENSIONAL TEMPLATE OF A PARTICULAR VOLUME OF AN OBJECT	Dr. Abhishek Gupta	India	Published (03.03.2023)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
22.	Patent	2021	202111033627	A SYSTEM AND METHOD FOR PROCESSING OF REAL TIME IMAGES	Dr. Amit Kant Pandit Mr. Shubham Mahajan	India	Published (27.08.2021)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
23.	Patent	2022	202211014084	STEARIC ACID BASED ANNULUS FINS TYPE EVACUATED TUBE SOLAR COLLECTOR	Dr. Kapil Chopra, Dr Vineet Veer Tyagi	India	Published (12.01.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
24.	Patent	2023	202311038026	A METHOD FOR LIVE TRANSCRIPTION AND SUMMARIZATION USING DEEP LEARNING PROCESSING AND LANGUAGE NATURAL	Dr. Baijnath Kaushik	India	Filed (02.06.2023)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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25.	Patent	2018	201811020588	A POLYMERASE CHAIN REACTION (PCR) KIT AND PROCESS FOR MAKING THE SAME	Dr. Swarkar Sharma	India	Granted (29.05.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
26.	Patent	2024	202411058382	3D PRINTED BITE BLOCKER WITH DETACHABLE TONGUE RETRACTOR"	Dr. Ankush Raina	India	Filed (01.08.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
27.	Patent	2024	202411090484	3D PRINTED BITE BLOCKER WITH GROOVED LOCK MECHANISM FOR IMPROVED DENTAL PROCEDURES	Dr. Ankush Raina	India	Filed (21.11.2024)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
28.	Patent	2025	202511003663	3D PRINTED ADJUSTABLE WIRE HOLDER	Dr. Ankush Raina, Anil Kumar, LA	India	Filed (16.01.2025)	*Potential for startup/Technology Transfer if permitted by authorities as per policy

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29.	Patent	2025	202511023454	SINGLE INTEGRATED HOLDER CASE FOR MOBILE AND POWER BANK	Dr. Ankush Raina, Dr. Kamni, Anu Priya, Ruchi Sharma, Tavishi Sharma, Rohit, Shubham Choudhary,	India	Filed (17.03.2025)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
30.	Patent	2025	202511036310	ADJUSTABLE 3D PRINTED BITE BLOCKER	1. Ankush Raina 2. Rounaq Preet Singh	India	Filed (15.04.2025)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
31.	Patent	2025	202511050269	INTELLIGENT MULTISENSOR FIRE SAFETY AND EMERGENCY ALERT SYSTEM AND METHOD THEREOF	<i>1. Dr. Rohit Tanwar, 2. Piyush Kumar, 3. Sonali Bhadra, and 4. Dhruv Tandon</i>	India	Filed (26.05.2025)	*Potential for startup/Technology Transfer if permitted by authorities as per policy
32.	Patent	2025	202511055815	A SYSTEM FOR ENHANCING DATA SECURITY THROUGH CONTEXT-AWARE FRAGMENTATION AND METHOD THEREOF	Dr. Rohit Tanwar	India	Filed 10-06-2025	*Potential for startup/Technology Transfer if permitted by authorities as per policy