

Patent Granted Year-wise (2000-2024) at ICAR-National Dairy Research Institute, Karnal

2024 (07)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A biopolymer based electrospun Oxygen indicator for Dairy Products Packing	201811023361	Narender Raju Panjagri, Shivam Panwar, Ashish Kumar Singh, Prashant Saurab Minz, Richa Badola, Gaurav Kr Deshwal	502210 on 23-01-2024
2	A process for production of antimicrobial coagulant formulation for making extended shelf-life paneer	202111007461	Pradip Vishnu behare, Rallapalli Vembar Rajanikar, Sudhir Kumar Tomar, Diwas Pradhan, Rajan Sharma, Sanket Borad,	504293 on 29/01/2024
3	Construction of mutant strain of kluyveromyces marxianus for enhanced galactose utilization	201711030808	Shilpa Viz, Arun Beniwal, Priyanka Saini, Sachinandan De	511469 on 16-02-2024
4	Design and development of nanofluid based extended surface module for milk cooling	201811021472	Ravi Prakash, Chikkamutharayappa Manjunatha, Guruvanna Mahesh Kumar, Kerekoppa Puttaaiah Bhatta Ramesha, Giriya pura Basavarajappa Darshan, Menon Rekha Ravindra	516796 on 28-02-2024
5.	A crosslinked membrane with flow-line capable of arresting free-flowing gold nanoparticles and the process for the same	201711036404	Y.S. Rajput, Nanda Dhiraj Kumar, Rajan Sharma	533338 on 16-04-2024

6.	Label for indicating freshness of indian dairy products and preparation method thereof	202111004590	Narender Raju Panjagari, Rakesh Kumar Raman, Karpurapu Uma, Ashish Kumar Singh, Sangita Ganguly	534389 on 23-04-2024
7	A pail for cooling milk simultaneous to milking	202011033807	Ravi Prakash, Menon Rekha Ravindra	545011 on 15-07-2024
2023 (05)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A Strip for detection of neutralizers in milk	201811030055	Rajan Sharma, Y.S. Rajput, Priyae Brath Gautam, and Bimlesh Mann	421478 on 13.02.2023
2	A strip for detection of maltodextrin in milk and process for the same	2097/DEL/2014	Rajan sharma, Y.S. Rajput, Bimlesh Mann, Prerna Narula and Rahul Thakur	427031 on 27.03.2023
3	Microfluidic method for enrichment of live and motile spermatozoa of cattle	202011008229	Ashok kumar mohanty, vinod kumar yata, bhanu prakash, vibhav katoch, neeraj yadav, dharmendra kumar gangwar, Sudarshan kumar, Tushar kumar mohanty	436709 on 30.06.2023
4	Rapid spores-enzyme based miniaturised assay (s) for detection of pesticide residues	3819/DEL/2015	Dr. Naresh Kumar, Ms. Nimisha Tehri, Mr. Rajesh Gopaul, Mr. Pradeep kumar sharma, Mr. Brijesh Kumar, Ms. Spurti Morab, Mr. Raghu H.V.	450906 on 12.09.2023
5	The preparation of buffalo milk casein hydrolysates with enriched antioxidative peptides and the process thereof	201711023424	Rajesh Kumar, Rajeev Kapila, Nichal Mayur Ashok Rao, Sowmya, Gulshan Dass, Bimlesh Mann, Suman Kapila,	460340 on 18.10.2023

2022 (08)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1.	A milk-protein based nutritive antacid and a process for its preparation	574/DEL/2014	Amit Kumar Jaylalbhai, Patel Ashok Kumar Ambalal Patel & Ram Ran Bijoy Singh	402839 On 02.08.2022
2.	Antimicrobial nanoemulsion of clove oil stabilized with milk protein and a process thereof	913/DEL/2015	Bimlesh Mann, Minaxi, Rajan Sharma & Rajesh Kumar	401941 on 25.07.2022
3.	Aptamers specific for cefquinome	1775/DEL/2015	Rajan Sharma, Amit Kumar Barui, Y.S. Rajput, & Bimlesh Mann	395869 on 29.04.2022
4.	A process for manufacture of low-fat chakka and shrikhand by using exopolysaccharides producing bacteria	201811033236	Pradip V. Behare, Sanket Borad, Harisha, & SK Tomar	388158 on 31.01.2022
5.	Stabilization of non-ionic surfactant based nanovesicles loaded with resveratrol using stearic acid and method of preparation thereof	201811004766	Battula SurendraNath, Vankayala Jaya Sravani, Kandasamy Ruckmani, Mariya Antoniraj Gover Antoniraj, Pushpadass Heartwin Amaladhas, Naik Lakshmana Naik, & Franklin Magdaline Eljeeva Emerald	404471 On 25.08.2022
6.	A peptide with osteoanabolic and antiresorptive activity	2778/DEL/2013	Venkatesa Perumal Shanmugam, Suman Kapila, Rajeev Kapila	405144 On 30.08.2022
7.	Mangifera indica flower panicles' extract stabilized gold nanoparticles	807/DEL/2015	Varij Nayan, Suneel Kumar Onteru, and Dheer Singh	408952 on 12.10.2022

	and method for making the same			
8.	Two Stage Enzyme Assay for Detection of <i>Listeria Monocytogenes</i> in Milk Products	1357/DEL/2013	Mandeep Balhara, Naresh Kumar, Geetika Thakur, Hirikyathanahalli Raghu, Vinay Kumar, Ramakant Lawaniya, Alia Khan, Shabnam	410633 on 31.10.2022
2021 (07)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	Method and system for automatic identification and estrous detection in buffaloes on their vocalization patterns	3090/DEL/2011	Yajuvendra Singh, S. P. Lathwal, T. K. Mohanty, A. P. Ruhil & Shiv Prasad	378373on 30.09.2021
2	A strip based detection of added urea in milk and process for the same	3472/DEL/2013	Rajan Sharma, Panchal Bhavesh Kumar R. & Y. S. Rajput	363894on 31.03.2021
3	Development of enzyme-spore based assay (s) for monitoring antibiotic residues in milk	2213/DEL/2014	Naresh Kumar, Alia Khan, Shivani Arora, Falguni Patra, Meenakshi Dahiya, Mandeep Balhara, Pradeep Kumar Sharma, & Suleman Shaikh	365074 on 21.04.2021
4	Marker enzymes and spore germination based assay for detection of <i>e. Coli</i> in milk and milk products	2214/DEL/2014	Naresh Kumar, Ramakant Lawaniya, Avinash, Bhawna Arora, Raghu HV, Mandeep Balhara, Saurabh Kadyan, & Viani Kumar	367110 on 20.05.2021
5	A strip based test for detection of detergent in milk	750/DEL/2015	Y.S. Rajput, Gulab Singh, & Rajan Sharma	363588 on 30.03.2021
6	Novel peptide sequence and polyclonal antibodies for the detection of cow and buffalo luteinizing hormone	1854/DEL/2015	Varij Nayan, Suneel Kumar Onteru & Dheer Singh	364236 on 07.04.2021

7	Caseinophosphopeptides-divalent metal (iron/zinc) nanocomplexes and method of preparation thereof	201711010975	Bimlesh Mann, Prabin Sarkar, Rajan Sharma, Rajesh Bajaj & Munmun Sen	385768 on 31.12.2021
2020 (03)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A process of bioethanol production by immobilized thermotolerant yeast from whey	3710/DEL/2011	Minakshi Dahiya & Shipa Viz	332454 on 19.02.2020
2	Aptamer specific for betacasomorphin 7 (BCM7)	3703/DEL/2013	Y. S. Rajput, Abhishek & Rajan Sharma	354948 on 31.12.2020
3	Oil in water curcumin nanoemulsion and method of preparation thereof	201611018434	Bimlesh Mann, Rajan Sharma & Rajesh Bajaj	345401 on 28.08.2020
2019 (08)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	Spectrophotometric method of estimation of Tannin acyl hydrolase activity in remendigesta	1120/DEL/2005	Keshab Barman & S.N. Rai	310997 on 09.04.2019
2	Process for shelf stable low -fat tomato-whey soup	714/DEL/2006	Sudhir Singh, Kamavaram Sudheer, Alok Jha, A. A. Patel & G. R. Patil	306128 on 23.01.2019
3	A formulation and process for ready-to reconstitute Basundi mix	2226/DEL/2007	Prateek Sharma, R. R. B. Singh, G.R. Patil & A. A. Patel	311005 on 09.04.2019
4	A process for preparation of feta cheese from Buffalo milk using microbial rennet	128/ DEL/2011	Sanjeev Kumar & S. K. Kanawjia	305768 on 16.01.2019
5	A qualitative and quantitative test for	3677/DEL/2011	Amit Kumar Barui, Rajan Sharma &	325924 on

	anionic detergent in milk"		Y.S. Rajput	27.11.2019
6	Real time detection of <i>enterococci</i> in dairy foods using spore germination based bioassay.	119/DEL/2012	Gurpreet Kaur, Naresh Kumar, G. Thakur, Raghu, H.V., N. Singh, V. K. Singh, & Raghav N.	325986 on 27.11.2019
7	Aptamers specific for aflatoxin m1 and b1	1864/DEL/2013	Shilpi Malhotra, Y. S. Rajput & Rajan Sharma	324848 on 11.11.2019
8	Casein hydrolysates rich in caseinophosphopeptides	331/DEL/2013	Bimlesh Mann, Prerna, & Rajesh Kumar	319794 on 04.09.2019
2018 (04)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	Estimation of tannin metabolites in blood serum and cow milk using HPLC	1831/DEL/2004	Keshab Barman & S.N. Rai	301155 on 19.09.2018
2	A process of preparing a spore inhibition-based enzyme substrate assay for monitoring aflatoxin mi in milk	3064/DEL/2010	Naresh Kumar, Namita Ashish Singh, Vanai Kumar Singh, Sunil Bhand & R.K. Maik	292836 on 13.02.2018
3	Three stage thin film scraped surface heat exchanger for continuous manufacture of khoa	583/DEL/2010	A. K. Dodeja, Dharam Pal & S. P. Agrawala	304816 on 21.12.2018
4	Value addition of paneer and dahi through herbal feed additives from cow milk	152/DEL/2009	Sachchidanand Rai, & Deepak Kumar Dubay	294928 on 26.03.2018
2017 (01)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant

1	A process for the preparation of ready to reconstitute kheer mix	1076/DEL/2006	AA Patel, GR Patil, R.R.B. Singh, N. Tyagi, V Tripathi & A Jha	284267 on 15.06.2017
2016 (03)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A multipurpose device for concentration, dialysis and buffer exchange of protein solution and a process for the same	1703/DEL/2006	Y.S. Rajput & M.P. Divya	276077 on 29.09.2016
2	Spore germination based detection kit for b-lactum group in milk	115/DEL/2009	Naresh Kumar, Sougata Das & Manju G	273160 on 20.05.2016
3	A kit for detection of adulteration of 'soymilk' in milk	396/DEL/2009	Y.S. Rajput, Rajan Sharma & Poonam	275521 on 08.09.2016
2015 (02)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A kit for detection of detergent in milk	1970/DEL/2006	Y.S. Rajput, Rajan Sharma & Sumandeep Kaur	264661 on 14.01.2015
2	A process for the preparation of milk cake	641/DEL/2007	Anil Kumar, G.R. Patil, A.A. Patel, & R.R.B Singh	270312 On 10.12.2015
2014 (04)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A novel process of sporulation, activation and germination in thermophilic bacteria for rapid	1479/DEL/2006	Naresh Kumar, Sharmila Sawant, G.R. Patil, & R.K. Malik	264145 on 09.12.2014

	detection of antibiotic residues in milk			
2	Process for manufacture of spray dried cheddar flavour base/ concentrate	1181/DEL/2007	D. K. Sharma, & B. D. Tiwari	257068 on 30.08.2014
3	A non-invasive DNA isolation methodology in dairy animals	1366/DEL/2007	Sachinandan De, Ashutosh Sharma, Paras Yadav, Tirtha Kumar Datta & S.L. Goswami	258646 on 28.01.2014
4	A process for commercial manufacture of kradi	2134/DEL/2008	G.R. Patil, Hilal Ahmad Punoo, & R. R. B. Singh	260553 on 07.05.2014
2013 (01)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	A PCR based method for differentiating cow and buffalo milk	1385/DEL/2007	Sachinandan De, Rameshwar Singh, K.P. Singh, T.K. Datta, & S.L. Goswami	257958 on 22.11.2013
Before 2000 (3)				
S. No.	Title of Patent	Application No.	Inventor (s)	Grant No. and date of Grant
1	Process for producing bacterial rennet like enzymes	96317	Inderjit Babar, Ramanuja Puram Appachar Srinivasan, Subhash Chandra Charavorty, Mandyam Krishna kumar, Krishna iyengar, & Arjun Thanwardas Dudani	On 15.02.1967
2	Improvement in or relating to the preparation of khoa	112505	Asmi kumar Bannerjee, Inderpal Singh Verma, & Brojendra Chandra Bagchi	On 25.02.1969
3	A process for the preparation of a beverage	69/DEL/1985	D.N. Gandhi	160280 on 04.07.1997