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		Conn Center for Renewable Energy Research Impact Report 2010 - 2020 PATENTS ISSUED CONN CENTER STAFF												
			TOTAL PATENTS	21										
	Track Code	Intellectual Property Title	Name	Patent Number	Issue Date	Country of Filing	Туре	Application/ Provisional Number	Filing Date	Priority Date	Priority Application Number	Status	Track Code #	Affiliation
1	05033	METHOD FOR THE RAPID SYNTHESIS OF LARGE QUANTITIES OF METAL OXIDE NANOWIRES AT LOW TEMPERATURES	Mahendra Sunkara	7,591,897	09/22/09	United States	Non-Provisional	11/385,015	03/20/06	03/22/05		Issued	05033-13	Conn Center
2	03033	TUBULAR CARBON NANO/MICRO STRUCTURES AND METHOD OF MAKING SAME	Mahendra Sunkara	7,597,941	10/06/09	United States	Non-Provisional	10/937,738	09/09/04	09/09/03	60/501,533	Issued	03033-13	Conn Center
3	03005	SYNTHESIS OF FIBERS OF INORGANIC MATERIALS USING LOW-MELTING METALS	Mahendra Sunkara	7,713,352	05/11/10	United States	Nonprovisional-CIP	11/521,084	09/14/06	09/16/03	10/664072;10/187460	Issued	03005-06	Conn Center
4	02040	BULK SYNTHESIS OF METAL AND METAL BASED DIELECTRIC NANOWIRES	Mahendra Sunkara	7,771,689	08/10/10	United States	Non-Provisional	10/705,687	11/10/03	11/08/02	60/425,194	Expired	02040-04	Conn Center
5	08018	METHOD FOR ELECTROSTATIC DEPOSITION OF GRAPHENE ON A SUBSTRATE	Gamini Sumanasekera	7,790,242	09/07/10	United States	Non-Provisional	12/248,096	10/09/08	10/09/07	60/978,516	Issued	08018-02	Conn Center
6	01031	GROWTH OF TEXTURED GALLIUM NITRIDE THIN FILMS ON POLYCRYSTALLINE SUBSTANCES	Mahendra Sunkara	7,819,974	10/26/10	United States	Nonprovisional-Continuatio	n 11/824,934	07/03/07	04/30/02		Issued	01031-03	Conn Center
7	09055	METHODS AND SYSTEMS FOR FABRICATION OF GRAPHENE NANORIBBONS	Gamini Sumanasekera	7,887,888	02/15/11	United States	Non-Provisional	12/489,903	06/23/09			Abandoned	09055-01	Conn Center
8	07018	MICROFLUIDIC DEVICES AND METHODS OF USING SAME	Gamini Sumanasekera	8,298,392	10/30/12	United States	Non-Provisional - US Natl S	5(12/988,713	10/20/10	04/21/08	61/046,664; 61/050,411	Issued	07018-04	Conn Center
9	08070	ANODE MATERIALS FOR LITHIUM-ION BATTERIES	Gamini Sumanasekera, Mahendra Sunkara	8,920,970	2014 12/30/14	United States	Non-Provisional	12/650,081	12/30/09	12/30/08	61/141,512	Issued	08070-02	Conn Center
10	11068	METHODS FOR SYNTHESIZING METAL OXIDE NANOWIRES	Mahendra Sunkara	9,409,141	2016 08/09/16	United States	Non-Provisional	13/183,191	07/14/11		13/183,191	Issued	11068-01	Conn Center
					2017									
11	07070	REACTOR AND METHOD FOR PRODUCTION OF NANOSTRUCTURES	Mahendra Sunkara, Jeong Kim		04/25/17	United States	Nonprovisional-CIP	13/439,592	04/04/12	10/09/07	60/978,673	Issued	07070-03	Conn Center
12	12014	PHOTOELECTROCHEMICAL CELL INCLUDING Ga(Sbx)N1-x SEMICONDUCTOR ELECTRODE	Mahendra Sunkara, Jacek Jasinski	9,755,023	09/05/17	United States	Non-Provisional	13/630,875	09/28/12	09/30/11	61/541,461	Issued	12014-01	Conn Center
13	12014	PHOTOELECTROCHEMICAL CELL INCLUDING Ga(Sbx)N1-x SEMICONDUCTOR ELECTRODE	Swathi Sunkara, Jacek Jasinski, Mahendra Sunkara	9,755,023	09/05/17	United States	Non-Provisional	13/630,875		9/30/11	61/541,461	Issued	12014-01	Conn Center
	12088	Catalyst Composition and Methods for Desulfurization	Mahendra Sunkara	10,030,201	2018 07/24/18	United	Non-Provisional	13/942,633	07/15/13	07/13/12	61/671,384	Issued	12088-02	Conn Center
14		METHODS FOR MAKING COPPER INKS AND FILMS				States		14/485,382	09/12/14	09/12/13	61/671,384	Issued	14015-02	Conn Center
15	14015	ME I HOUS FOR MAKING COPPER INKS AND FILMS	Thad Druffel, Ruvini Dharmadasa, Delania Amos, Meneka Jha	10,047,236	08/14/18	United States	Non-Provisional	17/403,302	03/12/14	03/12/13	0 1101 1,304	199060	14010-02	COIIII CEIREI
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11	16038	Solar Hydrogen Production from Ambient Water Vapor Electrolysis	Joshua Spurgeon	10337107	07/02/19	United States	Non-Provisional	15/584,649	5/2/17	5/3/16	62/331,101	Issued	16038-02	Conn Center
1	15015	PROCESS FOR ISOLATING C5 SUGARS FROM BIOMASS HYDROLYZATE	Jagannadh Satyavolu, Michael Nantz	10407453	09/10/19	United States	Non-Provisional	15/093,005	4/7/16	4/7/15	62/144,104	Issued	15015-02	Conn Center
					2020									
1:	14047	CORE-SHELL NANOSTRUCTURES AND RELATED INKS, FILMS, AND METHODS	Thad Druffel, Ruvini Dharmadasa, Delania Amos	10563080	02/18/20	United States	Non-Provisional - US Natl S	15/507,363	8/28/15	8/29/14	62/043,967	Issued	14047-04	Conn Center
1:	15082	METHODS FOR SYNTHESIZING CARBON NANOCAGES	Jacek Jasinski, Gamini Sumanasekera	10584033	03/10/20	United States	Non-Provisional - US Natl S	15/760,083	9/14/16	9/14/15	62/218,332	Issued	15082-03	Conn Center
2	16053	METHODS FOR FORMING A PEROVSKITE SOLAR CELL	Thad Druffel	10714688	07/14/20	United States	Nonprovisional-CIP	16/165,448	2/27/17	2/25/16	62/299,593; CIP of 15/443,766	Issued	16053-03	Conn Center
2	15060	Production of Mixed Metal Oxide Nanostructured Compounds	Mahendra Sunkara	10766787	09/08/20	United States	Non-Provisional	15/342,048	11/2/16	11/2/15	62/249,518	Issued	15060-02	Conn Center
					2022									
2:	18030	MULTI-STEP PROCESS AND SYSTEM FOR CONVERTING CARBON DIOXIDE TO A MULTI-CARBON ALCOHOL	Joshua Spurgeon	11,390,954	7/19/22	United States	National Stage	16/959,561	7/1/20			Issued	18030-03	Conn Center
2:	19095	Liquid Phase Epitaxy of III-V Materials and Alloys	Mahendra Sunkara	11,441,234	9/13/22	United States	Non-Provisional	17/068,179	10/12/20			Issued	19095-02	Conn Center
					2023									
24	18046	FREQUENCY SELECTIVE SURFACES FOR TRACKING, LABELING, AND IDENTIFICATION	Thad Druffel	11,687,753	6/27/23	United States	National Stage	16/980,148	9/11/20			Issued	18046-03	Conn Center

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