

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT7207430

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	X DEVELOPMENT LLC	07/01/2021
RECEIVING PARTY DATA		
Name:	INTRINSIC INNOVATION LLC	
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Postal Code:	94043	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Application Number:	17530004
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NAME OF SUBMITTER:	FALLON O'DANIEL	
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DATE SIGNED:	03/04/2022	
Total Attachments: 12		
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PATENT ASSIGNMENT AGREEMENT

This Patent Assignment Agreement (the "Agreement"), effective as of July 1, 2021, is made by and between X DEVELOPMENT LLC, a Delaware limited liability company ("Assignor") and INTRINSIC INNOVATION LLC, a Delaware limited liability company ("Assignee").

WHEREAS, Assignor and Assignee, along with certain other parties thereto, entered into a certain Contribution and Intellectual Property License Agreement dated as of July 1, 2021, pursuant to which Assignor agreed to convey, assign and otherwise transfer and Assignee agreed to accept, among other assets, all of Assignor's right, title and interest in and to the patents and patent applications set forth in Schedule A attached hereto (hereinafter collectively referred to as the "Patents").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

1. Assignor hereby conveys, assigns and transfers to Assignee all of Assignor's right, title and interest in and to the Patents, including all of Assignor's rights to any and all causes of action and rights of recovery for past, present and future infringement thereof, rights to payment in respect of the Patents, and the right to claim priority from and prosecute the Patents.

2. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement, it being understood that all parties need not sign the same counterpart. Any signature page delivered electronically shall be binding to the same extent as an original signature page.

3. Assignor will execute any further documents reasonably required by Assignee to effect or record the assignment of the Patents.

[Signature Pages Follow]

IN WITNESS WHEREOF, Assignor has caused this Agreement to be executed by its duly authorized representative on the date set forth below.

X DEVELOPMENT LLC

By: 

Name: Kenneth H. Yi

Title: Chief Executive Officer, President and Secretary

Date: July 1, 2021

IN WITNESS WHEREOF, Assignee has caused this Agreement to be executed by its duly authorized representative on the date set forth below.

INTRINSIC INNOVATION LLC

By: Wendy Tan White

Name: Wendy Tan White

Title: Chief Executive Officer

Date: July 1, 2021

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
BR	1120210062769		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
CA	3059412		3/22/2018	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
CA	3113669		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
CN	201580025396.8	ZL 201580025396.8	4/30/2015	Systems and Methods for Time-Based Parallel Robotic Operation
CN	201580027799.6	ZL 201580027799.6	3/30/2015	Software Interface for Authoring Robotic Manufacturing Process
CN	201580028216.1	ZL 201580028216.1	4/30/2015	Systems and Methods for Instructing Robotic Operation
CN	201580028260.2	ZL 201580028260.2	3/30/2015	Runtime Controller for Robotic Manufacturing System
CN	201580059723.1	ZL 201580059723.1	8/26/2015	Continuous Pull Three-Dimensional Printing
CN	201,580,059,755	ZL201580059755.1	10/5/2015	SHIFTING A CURING LOCATION DURING 3D PRINTING
CN	201580076072.7	ZL 201580076072.7	12/22/2015	Voxel 3D Printer
CN	201780055043.1	ZL 201780055043.1	7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site
CN	201880023892.3	ZL 201880023892.3	3/22/2018	METHODS AND SYSTEMS FOR ESTABLISHING AND MAINTAINING A PRE-BUILD RELATIONSHIP
CN	201880024024.7		3/22/2018	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
CN	201980065164.3		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
CN	202010294008.9		4/30/2015	Systems and Methods for Time-Based Parallel Robotic Operation
CN	202110459342.X		7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site
DE	15725143.0	602015065973.2	4/30/2015	Systems and Methods for Instructing Robotic Operation
DE	15757630.7	602015054382.3	8/26/2015	Continuous Pull Three-Dimensional Printing
DE	15782176.0	602015016268.4	10/5/2015	SHIFTING A CURING LOCATION DURING 3D PRINTING
EP	15717719.7		3/30/2015	Runtime Controller for Robotic Manufacturing System
EP	15719329.3		3/30/2015	Software Interface for Authoring Robotic Manufacturing Process
EP	15725142.2		4/30/2015	Systems and Methods for Time-Based Parallel Robotic Operation
EP	15725143.0	3152009	4/30/2015	Systems and Methods for Instructing Robotic Operation
EP	15757630.7	3200983	8/26/2015	Continuous Pull Three-Dimensional Printing
EP	15782176.0	3204217	10/5/2015	SHIFTING A CURING LOCATION DURING 3D PRINTING
EP	15825744.4		12/22/2015	Voxel 3D Printer
EP	17749783.1		7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
EP	18781586.5		3/22/2018	METHODS AND SYSTEMS FOR ESTABLISHING AND MAINTAINING A PRE-BUILD RELATIONSHIP
EP	18808777.9		3/22/2018	Automatic Generation of Toolpaths
EP	18809241.5		3/22/2018	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
EP	19810796.3		5/31/2019	ROBOTIC MOTION PLANNING
EP	19827050.6		6/25/2019	ROBOT COORDINATION IN A SHARED WORKSPACE
EP	19845638.6		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
FR	15725143.0	3152009	4/30/2015	Systems and Methods for Instructing Robotic Operation
FR	15757630.7	3200983	8/26/2015	Continuous Pull Three-Dimensional Printing
FR	15782176.0	3204217	10/5/2015	SHIFTING A CURING LOCATION DURING 3D PRINTING
GB	15725143.0	3152009	4/30/2015	Systems and Methods for Instructing Robotic Operation
GB	15757630.7	3200983	8/26/2015	Continuous Pull Three-Dimensional Printing
GB	15782176.0	3204217	10/5/2015	SHIFTING A CURING LOCATION DURING 3D PRINTING
JP	2019-503552	6759446	7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site
JP	2019-550780	6844023	3/22/2018	METHODS AND SYSTEMS FOR ESTABLISHING AND MAINTAINING A PRE-BUILD RELATIONSHIP
JP	2019-554555	6895539	3/22/2018	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
JP	2019-554655		3/22/2018	Automatic Generation of Toolpaths
JP	2020-147677		7/27/2017	CUSTOMIZED ROBOTIC INSTALLATION BASED ON MEASUREMENTS COLLECTED ON SITE
JP	2021-514996		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
KR	10-2019-7005974	10-2226599	7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site
KR	10-2019-7029571		3/22/2018	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
KR	10-2019-7029590		3/22/2018	Automatic Generation of Toolpaths
KR	10-2019-7032637	10-2266328	3/22/2018	METHODS AND SYSTEMS FOR ESTABLISHING AND MAINTAINING A PRE-BUILD RELATIONSHIP
KR	10-2021-7006811		7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site
KR	10-2021-7009716		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
KR	10-2021-7017812		3/22/2018	METHODS AND SYSTEMS FOR ESTABLISHING AND MAINTAINING A PRE-BUILD RELATIONSHIP
SG	11201900690S		7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
US	14/242,828	9,701,018	4/1/2014	Software Interface for Authoring Robotic Manufacturing Process
US	14/242,840	9,841,749	4/1/2014	Runtime Controller for Robotic Manufacturing System
US	14/295,168	9,308,647	6/3/2014	Systems and Methods for Instructing Robotic Operation
US	14/333,311	9,555,545	7/16/2014	Systems and Methods for Time-Based Parallel Robotic Operation
US	14/333,335	9,278,449	7/16/2014	Closed-Loop Control System for Robotic Operation
US	14/463,530	9,808,992	8/19/2014	Modular 3D Printing Using a Robot Arm
US	14/523,214	9,873,223	10/24/2014	Shifting a Curing Location During 3D Printing
US	14/574,158		12/17/2014	Packaging Based on Planar Structures
US	14/574,201	9,840,347	12/17/2014	Adhering Modular Elements for Packaging Structures
US	14/574,324	9,828,128	12/17/2014	On-Demand Protective Structures for Packaging Items in a Container
US	14/574,333		12/17/2014	Actuated Molding Device for Construction of Packaging Structures
US	14/577,572	10,118,343	12/19/2014	Fabrication Baseplate with Anchor Channels
US	14/588,039	9,840,045	12/31/2014	Voxel 3D Printer
US	14/588,082	9,827,713	12/31/2014	Wet/Dry 3D Printing
US	15/003,526	9,757,859	1/21/2016	Tooltip Stabilization
US	15/006,290	9,993,924	1/26/2016	Closed-Loop Control System for Robotic Operation
US	15/007,558	9,744,665	1/27/2016	Optimization of Observer Robot Locations
US	15/009,621	10,059,003	1/28/2016	Multi-Resolution Localization System
US	15/043,969		2/15/2016	Dynamic Work Scheduler for Autonomous and Non-Autonomous Actors in Construction/Fabrication
US	15/059,540	9,623,559	3/3/2016	Systems and Methods for Instructing Robotic Operation
US	15/159,487		5/19/2016	Interactive Object Design
US	15/159,549	10,155,273	5/19/2016	Interactive Object Fabrication
US	15/220,300	10,596,703	7/26/2016	Parametric Generation of Interlocking Joints
US	15/221,555	10,150,213	7/27/2016	GUIDE PLACEMENT BY A ROBOTIC DEVICE
US	15/222,568		7/28/2016	Error Accrual and Mitigation During Robotic Process
US	15/222,583	10,220,511	7/28/2016	Customized Robotic Installation Based on Measurements Collected on Site
US	15/384,273	9,915,937	12/19/2016	Systems and Methods for Time-Based Parallel Robotic Operation
US	15/481,909	10,307,908	4/7/2017	Methods and Systems for Establishing and Maintaining a Pre-Build Relationship

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
US	15/513,927	10,399,272	3/23/2017	Continuous Pull Three-Dimensional Printing
US	15/611,769		6/1/2017	Automatic Generation of Toolpaths
US	15/611,777		6/1/2017	Planning and Adapting Projects Based on a Buildability Analysis
US	15/616,096	10,486,308	6/7/2017	Software Interface for Authoring Robotic Manufacturing Process
US	15/648,649	10,507,578	7/13/2017	Optimization of Observer Robot Locations
US	15/673,182	10,144,128	8/9/2017	Tooltip Stabilization
US	15/708,864	10,509,392	9/19/2017	RUNTIME CONTROLLER FOR ROBOTIC MANUFACTURING SYSTEM
US	15/717,286	10,059,052	9/27/2017	Wet/Dry 3D Printing
US	15/810,586	10,370,136	11/13/2017	On-Demand Protective Structures for Packaging Items in a Container
US	15/814,061	9,950,465	11/15/2017	Voxel 3D Printer
US	15/995,431	11,000,950	6/1/2018	ROBOTIC MOTION PLANNING
US	16/050,471	10,500,732	7/31/2018	MULTI-RESOLUTION LOCALIZATION SYSTEM
US	16/052,418	10,895,870	8/1/2018	DYNAMIC FABRICATION ENGINE
US	16/139,216	10,286,602	9/24/2018	Fabrication Baseplate with Anchor Channels
US	16/154,923	10,987,812	10/9/2018	ERROR ACCRUAL AND MITIGATION DURING ROBOTIC PROCESS
US	16/176,102	10,618,165	10/31/2018	Tooltip Stabilization
US	16/182,733	10,967,501	11/7/2018	GUIDE PLACEMENT BY A ROBOTIC DEVICE
US	16/229,484		12/21/2018	DYNAMIC PROBABILISTIC MOTION PLANNING
US	16/251,175	10,882,181	1/18/2019	Customized Robotic Installation Based on Measurements Collected on Site
US	16/256,965		1/24/2019	LOCAL REPLANNING OF ROBOT MOVEMENTS
US	16/265,123		2/1/2019	ROBOTIC WORKSPACE LAYOUT PLANNING
US	16/269,155		2/6/2019	MOBILE ROBOTICS FRAME SYSTEM
US	16/287,613	10,704,887	2/27/2019	MULTI-BEAM LASER COORDINATE MEASURING SYSTEM
US	16/388,672		4/18/2019	ENHANCED ROBOT PATH PLANNING
US	16/392,761	11,040,448	4/24/2019	Methods and Systems for Establishing and Maintaining a Pre-Build Relationship
US	16/393,165		4/24/2019	ROBOT MOTION PLANNING
US	16/452,384		6/25/2019	ROBOT COORDINATION IN A SHARED WORKSPACE
US	16/458,628	10,987,869	7/1/2019	CONTINUOUS PULL THREE-DIMENSIONAL PRINTING
US	16/541,541		8/15/2019	INVERSE KINEMATIC SOLVER FOR WRIST OFFSET ROBOTS

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
US	16/598,655		10/10/2019	Software Interface for Authoring Robotic Manufacturing Process
US	16/681,233		11/12/2019	MULTI-RESOLUTION LOCALIZATION SYSTEM
US	16/688,129		11/19/2019	Optimization of Observer Robot Locations
US	16/689,302		11/20/2019	RUNTIME CONTROLLER FOR ROBOTIC MANUFACTURING SYSTEM
US	16/705,445		12/6/2019	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
US	16/724,883		12/23/2019	REDUCING MOTION BLUR FOR ROBOT-MOUNTED CAMERAS
US	16/724,939		12/23/2019	DATA LOGGER FOR A REAL-TIME ROBOTIC CONTROL SYSTEM
US	16/724,977		12/23/2019	ANALYSIS OF REAL-TIME SOFTWARE
US	16/725,620		12/23/2019	TASK PLANNING ACCOUNTING FOR OCCLUSION OF SENSOR OBSERVATIONS
US	16/727,024		12/26/2019	ROBOT PLAN ONLINE ADJUSTMENT
US	16/728,530		12/27/2019	SCHEDULING RESOURCE-CONSTRAINED ACTIONS
US	16/728,650		12/27/2019	ROBOT PLAN ONLINE ADJUSTMENT
US	16/728,660		12/27/2019	OFFLINE ROBOT PLANNING WITH ONLINE ADAPTATION
US	16/730,864		12/30/2019	TRANSFORMATION MODE SWITCHING FOR A REAL-TIME ROBOTIC CONTROL SYSTEM
US	16/730,871		12/30/2019	COMPOSABILITY FRAMEWORK FOR ROBOTIC CONTROL SYSTEM
US	16/731,531		12/31/2019	ROBOT PLANNING FOR ENVELOPE INVARIANTS
US	16/751,972		1/24/2020	AUTOMATIC GENERATION OF TOOLPATHS
US	16/798,938	10,800,036	2/24/2020	TOOLTIP STABILIZATION
US	16/838,641		4/2/2020	ROBOT CONTROL FOR AVOIDING SINGULAR CONFIGURATIONS
US	16/865,070		5/1/2020	TASK PLANNING FOR MEASUREMENT VARIANCES
US	16/865,940		5/4/2020	TRAJECTORY PLANNING FOR PATH-BASED APPLICATIONS
US	16/867,437		5/5/2020	GENERATING ROBOT TRAJECTORIES USING NEURAL NETWORKS
US	16/872,283		5/11/2020	ACCELERATING ROBOTIC PLANNING FOR OPERATING ON DEFORMABLE OBJECTS
US	16/880,724		5/21/2020	DISTRIBUTED ROBOTIC DEMONSTRATION LEARNING
US	16/880,813		5/21/2020	ROBOTIC DEMONSTRATION LEARNING DEVICE
US	16/880,857		5/21/2020	INTEGRATING SENSOR STREAMS FOR ROBOTIC DEMONSTRATION LEARNING
US	16/880,860		5/21/2020	SKILL TEMPLATE DISTRIBUTION FOR ROBOTIC DEMONSTRATION LEARNING
US	16/880,862		5/21/2020	SKILL TEMPLATES FOR ROBOTIC DEMONSTRATION LEARNING

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
US	16/880,866		5/21/2020	USER FEEDBACK FOR ROBOTIC DEMONSTRATION LEARNING
US	16/880,869		5/21/2020	SIMULATED LOCAL DEMONSTRATION DATA FOR ROBOTIC DEMONSTRATION LEARNING
US	16/883,895		5/26/2020	AUTOMATED SAFETY PROCEDURES FOR HUMAN INTERVENTION IN ROBOT SYSTEMS
US	16/885,015		5/27/2020	ROBOT EXECUTION SYSTEM
US	16/885,035		5/27/2020	ROBOT CONTROL PARAMETER INTERPOLATION
US	16/932,481		7/17/2020	ROBOT PLANNING USING UNMANNED AERIAL VEHICLES
US	16/987,948		8/7/2020	PREPARING ROBOTIC OPERATING ENVIRONMENTS FOR EXECUTION OF ROBOTIC CONTROL PLANS
US	17/002,271		8/25/2020	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
US	17/004,968		8/27/2020	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
US	17/005,031		8/27/2020	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
US	17/005,060		8/27/2020	PLANNING BY WORK VOLUMES TO AVOID CONFLICTS
US	17/006,482		8/28/2020	DYNAMIC PATH PLANNING FROM A FAULT CONDITION
US	17/006,492		8/28/2020	MULTI-OBJECTIVE ROBOT PATH PLANNING
US	17/006,571		8/28/2020	SPLITTING TRANSFORMERS FOR ROBOTICS PLANNING
US	17/006,620		8/28/2020	COMBINING TRANSFORMERS FOR ROBOTICS PLANNING
US	17/089,332		11/4/2020	OPTIMIZING CALIBRATION WITH CONSTRAINTS BETWEEN DIFFERENT COORDINATE FRAMES
US	17/089,631		11/4/2020	SOURCE-AGNOSTIC IMAGE PROCESSING
US	17/096,691		11/12/2020	SUPERVISED DOMAIN ADAPTATION
US	17/097,570		11/13/2020	DECENTRALIZED ROBOTIC OPERATING ENVIRONMENT OPTIMIZATION
US	17/108,761		12/1/2020	GENERATING ROBOTIC CONTROL PLANS
US	17/131,240		12/22/2020	ROBOT PLANNING
US	17/131,366		12/22/2020	ROBOT PLANNING
US	17/131,481		12/22/2020	ROBOT MOTION PLANNING ACCOUNTING FOR OBJECT POSE ESTIMATION ACCURACY
US	17/150,996		1/15/2021	DYNAMIC FABRICATION ENGINE
US	17/172,592		2/10/2021	Extending Underconstrained Motion Planning with arbitrary kinematic systems
US	17/203,147		3/16/2021	DETECTING ROBOTIC CALIBRATION ACCURACY DISCREPANCIES

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
US	17/230,294		4/14/2021	ROBOTIC OPERATING ENVIRONMENT RENDERING
US	17/245,709		4/30/2021	REAL-TIME ROBOTICS CONTROL FRAMEWORK
US	17/246,002		4/30/2021	REAL-TIME ROBOTICS CONTROL FRAMEWORK
US	17/246,082		4/30/2021	REAL-TIME ROBOTICS CONTROL FRAMEWORK
US	17/315,954		5/10/2021	ROBOTIC MOTION PLANNING
US	17/338,401		6/3/2021	ROBOTIC WORKSPACE INTROSPECTION VIA FORCE FEEDBACK
US	17/338,486		6/3/2021	WORKCELL MODELING USING MOTION PROFILE MATCHING AND SWEEP PROFILE MATCHING
US	17/343,312		6/9/2021	DETERMINING ROBOTIC CALIBRATION PROCESSES
US	17/347,996		6/15/2021	ROBOT INSTRUCTION DISTRIBUTION FRAMEWORK
US	17/348,264		6/15/2021	AUTOMATED SAFETY ASSESSMENT FOR ROBOT MOTION PLANNING
US	17/353,609		6/21/2021	STATE ESTIMATION FOR A ROBOT EXECUTION SYSTEM
US	17/353,620		6/21/2021	SAFETY TRAJECTORIES FOR ROBOTIC CONTROL SYSTEMS
US	17/373,024		7/12/2021	DATA LOGGER FOR A REAL-TIME ROBOTIC CONTROL SYSTEM
US	17/379,920		7/18/2019	SOFTWARE INTERFACE FOR AUTHORIZING ROBOTIC MANUFACTURING PROCESS
US	61/987,367		5/1/2014	Modular 3D Printing Using a Robot Arm
US	62/001,517		5/21/2014	Closed-Loop Control System for Robotic Operation
US	62/001,521		5/21/2014	Systems and Methods for Time-Based Parallel Robotic Operation
US	62/059,521		10/3/2014	Continuous Pull Three-Dimensional Printing
US	62/059,951		10/5/2014	Shifting a Curing Location During 3D Printing
US	62/078,202		11/11/2014	Wet/Dry 3D Printing
US	62/689,351		6/25/2018	ROBOT COORDINATION IN A SHARED WORKSPACE
US	62/894,178		8/30/2019	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
US	62/894,365		8/30/2019	SPLITTING TRANSFORMERS FOR ROBOTICS PLANNING
US	62/894,402		8/30/2019	COMBINING TRANSFORMERS FOR ROBOTICS PLANNING
US	62/894,610		8/30/2019	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
US	62/894,613		8/30/2019	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
US	62/894,615		8/30/2019	PLANNING BY WORK VOLUMES TO AVOID CONFLICTS
US	62/894,616		8/30/2019	DYNAMIC PATH PLANNING FROM A FAULT CONDITION

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
US	62/894,618		8/30/2019	MULTI-OBJECTIVE ROBOT PATH PLANNING
US	62/941,293		11/27/2019	Regularized Stable Alpha Hulls
WO	PCT/US2015/023358		3/30/2015	Software Interface for Authoring Robotic Manufacturing Process
WO	PCT/US2015/023359		3/30/2015	Runtime Controller for Robotic Manufacturing System
WO	PCT/US2015/028526		4/30/2015	Systems and Methods for Time-Based Parallel Robotic Operation
WO	PCT/US2015/028528		4/30/2015	Systems and Methods for Instructing Robotic Operation
WO	PCT/US2015/046883		8/26/2015	Continuous Pull Three-Dimensional Printing
WO	PCT/US2015/053946		10/5/2015	SHIFTING A CURING LOCATION DURING 3D PRINTING
WO	PCT/US2015/067386		12/22/2015	Voxel 3D Printer
WO	PCT/US2017/044076		7/27/2017	Error Accrual and Mitigation During Robotic Process
WO	PCT/US2017/044095		7/27/2017	Customized Robotic Installation Based on Measurements Collected on Site
WO	PCT/US2018/023698		3/22/2018	Automatic Generation of Toolpaths
WO	PCT/US2018/023772		3/22/2018	METHODS AND SYSTEMS FOR ESTABLISHING AND MAINTAINING A PRE-BUILD RELATIONSHIP
WO	PCT/US2018/023775		3/22/2018	PLANNING AND ADAPTING PROJECTS BASED ON A BUILDABILITY ANALYSIS
WO	PCT/US2019/034989		5/31/2019	ROBOTIC MOTION PLANNING
WO	PCT/US2019/039062		6/25/2019	ROBOT COORDINATION IN A SHARED WORKSPACE
WO	PCT/US2019/044599		8/1/2019	DYNAMIC FABRICATION ENGINE
WO	PCT/US2019/067728		12/20/2019	DYNAMIC PROBABILISTIC MOTION PLANNING
WO	PCT/US2020/015003		1/24/2020	LOCAL REPLANNING OF ROBOT MOVEMENTS
WO	PCT/US2020/029600		4/23/2020	ROBOT MOTION PLANNING
WO	PCT/US2020/046217		8/13/2020	INVERSE KINEMATIC SOLVER FOR WRIST OFFSET ROBOTS
WO	PCT/US2020/047810		8/25/2020	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
WO	PCT/US2020/048540		8/28/2020	DYNAMIC PATH PLANNING FROM A FAULT CONDITION
WO	PCT/US2020/048577		8/28/2020	MULTI-OBJECTIVE ROBOT PATH PLANNING
WO	PCT/US2020/048580		8/28/2020	ROBOT PLANNING FROM PROCESS DEFINITION GRAPH
WO	PCT/US2020/048602		8/28/2020	SPLITTING TRANSFORMERS FOR ROBOTICS PLANNING
WO	PCT/US2020/067163		12/28/2020	TRANSFORMATION MODE SWITCHING FOR A REAL-TIME ROBOTIC CONTROL SYSTEM
WO	PCT/US2020/067334		12/29/2020	COMPOSABILITY FRAMEWORK FOR ROBOTIC CONTROL SYSTEM

Schedule A

Country	Application Number	Patent Number	Filing Date	Title
WO	PCT/US2021/029899		4/29/2021	TRAJECTORY PLANNING FOR PATH-BASED APPLICATIONS
WO	PCT/US2021/030399		5/3/2021	GENERATING ROBOT TRAJECTORIES USING NEURAL NETWORKS
WO	PCT/US2021/031478		5/10/2021	ACCELERATING ROBOTIC PLANNING FOR OPERATING ON DEFORMABLE OBJECTS
WO	PCT/US2021/031482		5/10/2021	SKILL TEMPLATES FOR ROBOTIC DEMONSTRATION LEARNING
WO	PCT/US2021/032736		5/17/2021	SKILL TEMPLATE DISTRIBUTION FOR ROBOTIC DEMONSTRATION LEARNING
WO	PCT/US2021/032741		5/17/2021	DISTRIBUTED ROBOTIC DEMONSTRATION LEARNING
US				Alpha Sponge for Efficient Sweeping
US				Build Omnibus Provisional
US				Call-and-Continue Execution and Planner System for Task-Based Robot Control:
US				Mobile Base + Arm Dynamic Constraint System
US				Motion Planning for Robot Arm based on Configuration-Switch Segmenting
US				Recording multiple tracks of movement
US				Regularized Stable Alpha Hulls
US				Resource-associated sample generation for skill parameters
US				Rote/Skills: Camera Wristband
US				Rote/Skills: Learning from Environmental Data Signals
US				Rote/Skills: Reward Signals for Demonstration Learning
US				Rote/Skills: User Interfaces for Teaching Robots
US				Skill Learning: Robotic Intelligence Templates
US				Skill Learning: Smart State Machine
US				Stereolithography with Multi-Projector Array
US				Use Robot and Robot End-Effector Geometry and Pose Detectors For Continuous Calibration and Alignment
US				Variable Resolution Dynamic Motion Capture System
US				Visualizer Interface for Robotic Manufacturing System
US				Visualizer Interface for Robotic Manufacturing System