PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jeffrey Bush	09/20/2022
Antonio Raymond Papania-Davis	09/20/2022
Weishi Yan	09/20/2022
Kartikye Mittal	09/20/2022

RECEIVING PARTY DATA

Name:	X DEVELOPMENT LLC	
Street Address:	1600 AMPHITHEATRE PARKWAY	
City:	MOUNTAIN VIEW	
State/Country:	CALIFORNIA	
Postal Code:	94043	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17934361

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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ATTORNEY DOCKET NUMBER:	43374-0549001	
NAME OF SUBMITTER:	MARYANN WHITE	
SIGNATURE:	/Maryann White/	
DATE SIGNED:	09/23/2022	

Total Attachments: 3

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ASSIGNMENT and CONFIRMATION

We, Jeffrey Bush, Antonio Raymond Papania-Davis, Weishi Yan and Kartikye Mittal, each hereby confirm the assignment and transfer to X Development LLC, a Delaware limited liability company having a place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043, and its successors and assigns (collectively, "ASSIGNEE") of all of our individual and joint right, title and interest throughout the world in and to any and all inventions and improvements that are the subject or subjects of a patent application entitled

SIMULATION AND OPTIMIZATION OF CONCRETE RECIPE

that names us as inventors, and was med in the <u>United States Patent and Trademark</u>		
Office (USPTO) on 9/22/2022 , as application No. 17/934,361 ; and		
in the PCT Receiving Office of the United States Patent and Trademark Office (USPTO)		
on 9/21/2022 as Application No. PCT/US2022/044257, which claims priority		
to US Provisional <u>63/248,365</u> filed on September 24, 2021. We authorize and request		
the attorneys filing the application to complete this assignment by inserting the filing		
date and serial number of the application when known. The foregoing assignment and		
transfer occurred by operation of one or more agreements relating to our employment		
by X Development LLC or an affiliate of X Development LLC. Should any of us have		
any remaining interest, we each hereby assign and transfer any right, title or interest we		
may have in the above-mentioned inventions and improvements anywhere in the world		
to ASSIGNEE.		

This assignment and confirmation includes the foregoing patent application or patent; all legal equivalents thereof in any country and all patents issuing therefrom; all patents, utility models, and design registrations granted for any of said inventions and improvements throughout the world; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. We authorize ASSIGNEE to

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apply in all countries in our names or in the name of ASSIGNEE for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for the assigned inventions and improvements.

The foregoing assignments have been made for good and valuable consideration, the receipt of which is hereby acknowledged, and in accordance with the employment-related agreements existing at the time the above-mentioned inventions and improvements were made.

We hereby represent and covenant that no assignment, agreement or encumbrance has been or will be made or entered into by us that would conflict with the abovementioned assignment of the inventions and improvements to ASSIGNEE.

We further covenant for ourselves and our respective heirs, legal representatives and assigns to provide to ASSIGNEE promptly upon the request of ASSIGNEE all pertinent facts and documents relating to any of the above-mentioned inventions and improvements, patent applications, patents and legal equivalents, as may be known and accessible to us; to testify as to the same in any interference, litigation, or proceeding relating thereto; and promptly to execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce any of the above-mentioned applications, inventions and improvements, patents and equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Dated: 9/20/2022	Jeffrey Bush
Dated:	DocuSigned by: 46E65C818B034A4 Antonio Raymond Papania-Davis

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9/20/2022 Dated: —— D62CB0ECE2D7455...

Weishi Yan

DocuSigned by:

Dated:_____

B6837575B8B0475... -Kartikye Mittal

DocuSigned by:

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