

# STARMESH GLOBAL™ WORLDWIDE PATENT PORTFOLIO OVERVIEW

PATENT NO.	COUNTRY	ISSUE/APPL FILING DATE	PRIORITY DATE	STATUS
<b>FAMILY A: "BENT PIPE"</b>				
Pat. No. 10,084,536	United States	September 25, 2018	August 25, 2016	In force - expires 7/21/37
Pat. No. 10,998,962	United States	May 4, 2021	August 25, 2016	In force - expires 7/21/37
Pat. No. 11,855,745	United States	December 26, 2023	August 25, 2016	In force - expires 7/21/37
App. No. 18/387,535	United States	November 7, 2023	August 25, 2016	Pending (Pub. No. US 2024/0088992)
<b>FAMILY B: "ROTATING SATELLITES"</b>				
Pat. No. 10,447,381	United States	October 15, 2019	August 25, 2016	In force - expires 8/23/37
Pat. No. 11,038,586	United States	June 15, 2021	August 25, 2016	In force - expires 8/23/37
App. No. 17/317,310	United States	March 27, 2021	August 25, 2016	Pending (Pub. No. US 2021/0399793)
<b>FOREIGN PATENTS &amp; APPLICATIONS</b>				
Pat. No. ZL 2017800519208	China	November 24, 2020	August 25, 2016	In force - expires 8/23/37
Pat. No. ZL 2020112170244	China	July 21, 2022	August 25, 2016	In force - expires 8/23/37
Pat. No. HK40006930	Hong Kong	August 20, 2021	August 25, 2016	In force - expires 8/23/37
Pat. No. 3 504 808	European PO	July 27, 2022	August 25, 2016	In force in DE, FR, GB - expires 8/23/37
Pat. No. 534537	India	April 23, 2024	August 25, 2016	In force - expires 8/23/37
Pat. No. 264883	Israel	May 28, 2020	August 25, 2016	In force - expires 8/23/37
Pat. No. 7245584	Japan	March 15, 2023	August 25, 2016	In force - expires 8/23/37
Pat. No. 370247	Mexico	December 5, 2019	August 25, 2016	In force - expires 8/23/37
Pat. No. RP:NG/PT/2018/2945	Nigeria	November 19, 2018	August 25, 2016	In force - expires 8/23/37
App. No. 1-2019-550023	Philippines	February 8, 2019	August 25, 2016	Pending
App. No. 10202102036V	Singapore	February 27, 2021	August 25, 2016	Pending
Pat. No. 2019/00468	South Africa	September 25, 2019	August 25, 2016	In force - expires 8/23/37
<b>FAMILY C: "STAR ANTENNA"</b>				
Pat. No. 10,085,200	United States	September 25, 2018	September 29, 2017	In force - expires 9/29/37
Pat. No. 10,791,493	United States	September 29, 2020	September 29, 2017	In force - expires 9/29/37
Pat. No. 11,356,921	United States	June 7, 2022	September 29, 2017	In force - expires 9/29/37
Pat. No. 11,832,160	United States	November 28, 2023	September 29, 2017	In force - expires 9/29/37
App. No. 18/387,878	United States	November 8, 2023	September 29, 2017	Pending (Pub. No. US 2024/0098616)
<b>FOREIGN PATENTS &amp; APPLICATIONS</b>				
Pat. No. 2018341561	Australia	February 27, 2023	September 29, 2017	In force - expires 9/27/38
App. No. 2023203635	Australia	June 23, 2023	September 29, 2017	Pending
App. No. 3076010	Canada	March 16, 2020	September 29, 2017	Pending
Pat. No. ZL 2018800627936	China	June 17, 2022	September 29, 2017	In force - expires 9/27/38
Pat. No. ZL 2022106613390	China	March 29, 2024	September 29, 2017	In force - expires 9/27/38
Pat. No. HK 40032247	Hong Kong	February 24, 2023	September 29, 2017	In force - expires 9/27/38
Pat. No. HK 40096829	Hong Kong	March 1, 2024	September 29, 2017	In force - expires 9/27/38
App. No. 18 860 787.3-1215	European PO	April 3, 2020	September 29, 2017	Pending

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<b>FAMILY C: "STAR ANTENNA" - FOREIGN PATENTS &amp; APPLICATIONS - CONTINUED</b>				
Pat. No. 529760	India	March 22, 2024	September 29, 2017	In force – expires 9/27/38
Pat. No. 7235734	Japan	February 28, 2023	September 29, 2017	In force – expires 9/27/38
App. No. 2023-027389	Japan	February 24, 2023	September 29, 2017	Pending
Pat. No. 10-2539125	South Korea	May 26, 2023	September 29, 2017	In force – expires 9/27/38
App. No. 10-2023-7017762	South Korea	May 25, 2023	September 29, 2017	Pending
App. No. MX/a/2020/003736	Mexico	April 16, 2020	September 29, 2017	Pending
Pat. No. NG/PT/C/2020/4428	Nigeria	August 17, 2023	September 29, 2017	In force – expires 9/27/38
App. No. 1-2020-550083	Philippines	March 13, 2020	September 29, 2017	Pending
Pat. No. 11202002249R	Singapore	October 19, 2022	September 29, 2017	In force – expires 9/27/38
App. No. 102022509250Q	Singapore	September 6, 2022	September 6, 2022	Pending
<b>FAMILY D: "ROUTES BY ORBITAL KNOWLEDGE"</b>				
Pat. No. 10,291,316	United States	May 14, 2019	December 11, 2017	In force – expires 7/13/38
Pat. No. 10,784,953	United States	September 22, 2020	December 11, 2017	In force – expires 7/13/38
Pat. No. 11,206,079	United States	December 21, 2021	December 11, 2017	In force – expires 7/13/38
Pat. No. 12,074,686	United States	August 27, 2024	December 11, 2017	In force – expires 7/13/38
<b>FOREIGN PATENTS &amp; APPLICATIONS</b>				
Pat. No. CN 111566948	China	June 23, 2023	December 11, 2017	In force – expires 12/4/38
App. No. 620210248121	Hong Kong	February 3, 2021	December 11, 2017	Pending
App. No. 18 888 292.2-1205	European PO	December 5, 2020	December 11, 2017	Pending
App. No. 202027029277	India	July 9, 2020	December 11, 2017	Pending
Pat. No. 7366018	Japan	October 12, 2023	December 11, 2017	In force – expires 12/4/38
App. No. 2023-175482	Japan	October 10, 2023	December 11, 2017	Pending
App. No. 10-2020-7019847	South Korea	July 9, 2020	December 11, 2017	Pending
App. No. NG/PT/C/2020/4632	Nigeria	June 10, 2020	December 11, 2017	Pending
App. No. 1-2020-550668	Philippines	May 20, 2020	December 11, 2017	Pending
App. No. 112020046375	Singapore	May 19, 2020	December 11, 2017	Pending
<b>FAMILY E: "ROUTING ALGORITHMS FOR STOCHASTIC-ORBIT SATELLITES"</b>				
Pat. No. 10,979,136	United States	April 13, 2021	July 12, 2018	In force – expires 7/11/39
Pat. No. 12,063,101	United States	August 13, 2024	July 12, 2018	In force – expires 7/11/39)
App. No. 18/610,345	United States	March 20, 2024	July 12, 2018	Pending (Pub. No. US 2024/0250751)
<b>FOREIGN PATENTS &amp; APPLICATIONS</b>				
App. No. 2019301682	Australia	December 22, 2020	July 12, 2018	Pending
App. No. 3104677	Canada	December 21, 2020	July 12, 2018	Pending
Pat. No. CN 112585887	China	May 12, 2023	July 12, 2018	In force – expires 7/10/39
App. No. 202310495839.6	China	April 28, 2023	July 12, 2018	Pending
App. No. 19 834 930.0-1205	European PO	February 12, 2021	July 12, 2018	Pending
App. No. 62021042678.4	Hong Kong	November 18, 2021	July 12, 2018	Pending

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<b>FAMILY E: "ROUTING ALGORITHMS FOR STOCHASTIC-ORBIT SATELLITES" - FOREIGN PATENTS &amp; APPLICATIONS - CONTINUED</b>				
App. No. 42024085540.3	Hong Kong	January 17, 2024	July 12, 2018	Pending
Pat. No. 531182	India	March 31, 2024	July 12, 2018	In force – expires 7/10/39
App. No. 202328044913	India	July 4, 2023	July 12, 2018	Pending
App. No. 279844	Israel	December 29, 2020	July 12, 2018	Pending
App. No. 2021-500113	Japan	January 4, 2021	July 12, 2018	Pending
App. No. 10-2021-7004339	South Korea	February 11, 2021	July 12, 2018	Pending
Pat. No. 412619	Mexico	April 29, 2024	July 12, 2018	In force – expires 7/10/39
App. No. MX/a/2024/005078	Mexico	April 25, 2024	July 12, 2018	Pending
App. No. NG/PT/C/2021/5140	Nigeria	January 1, 2021	July 12, 2018	Pending
App. No. 1-2021-550110	Philippines	January 12, 2021	July 12, 2018	Pending
App. No. 11202012897W	Singapore	December 22, 2020	July 12, 2018	Pending
Pat. No. 2021/00600	South Africa	January 27, 2021	July 12, 2018	In force – expires 7/11/39
App. No. 2023/04094	South Africa	April 3, 2023	July 12, 2018	Pending
App. No. 1-2021-00751	Vietnam	February 9, 2021	July 12, 2018	Pending
<b>FAMILY F: "DATA TRANSMISSION DIVERSITY"</b>				
Pat. No. 11,870,543	United States	January 9, 2024	May 18, 2020	In force – expires 10/2/41
App. No. 18/401,534	United States	December 31, 2023	May 18, 2020	Pending
<b>FAMILY G: "AERODYNAMIC LEO AND VLEO SATELLITES"</b>				
App. No. 17/367,663	United States	July 6, 2021	July 10, 2020	Pending (Pub. No. US 2022/0029699)
<b>FOREIGN PATENTS &amp; APPLICATIONS</b>				
App. No. BR112022026213-2	Brazil	December 21, 2022	July 10, 2020	Pending
App. No. 3187423	Canada	December 15, 2022	July 10, 2020	Pending
App. No. 2021800486982	China	January 6, 2023	July 10, 2020	Pending
App. No. 21838154.9	European PO	February 6, 2023	July 10, 2020	Pending
App. No. 202317007372	India	February 6, 2023	July 10, 2020	Pending
App. No. NG/PT/PCT/2023/6828	Nigeria	January 4, 2023	July 10, 2020	Pending
<b>FAMILY H: "CONNECTING MOVING USERS VIA SATELLITES"</b>				
App. No. 17/539,236	United States	December 1, 2021	December 2, 2020	Pending (Pub. No. US 2022/0173795)
<b>FAMILY I: "WORLDWIDE COMMUNICATIONS USING DRONES AND SATELLITES"</b>				
Pat. No. 11,968,023	United States	April 23, 2024	December 2, 2020	In force – expires 12/1/41
App. No. 18/373,504	United States	September 27, 2023	December 2, 2020	Pending (Pub. No. US 2024/0031008)
Pat. No. 12,081,310	United States	September 3, 2024	December 2, 2020	In force – expires 12/1/41
<b>FAMILY J: "DRONE AND BALLOON NODES FOR MESH COMMUNICATIONS SYSTEMS"</b>				
App. No. PCT/US2023/22818	PCT	May 19, 2023	May 24, 2022	Pending (Pub. No. WO 2023/229923)
<b>FAMILY K: "MULTI-LEVEL DATA ENCRYPTION"</b>				
App. No. PCT/US2024/31191	PCT	May 27, 2024	June 1, 2023	Pending