

Title (en)  
METHOD AND APPARATUS FOR LIGHTER-THAN-AIR AIRSHIP WITH IMPROVED STRUCTURE AND DELIVERY SYSTEM

Title (de)  
VERFAHREN UND VORRICHTUNG FÜR LEICHTER-ALS-LUFT-LUFT-SCHIFF MIT VERBESSERTER STRUKTUR UND ABGABESYSTEM

Title (fr)  
PROCÉDÉ ET APPAREIL POUR DIRIGEABLE PLUS LÉGER QUE L'AIR AYANT UNE STRUCTURE ET UN SYSTÈME DE DISTRIBUTION AMÉLIORÉS

Publication  
**EP 4204300 A4 20240522 (EN)**

Application  
**EP 20951786 A 20200828**

Priority  
US 2020048340 W 20200828

Abstract (en)  
[origin: WO2022046064A1] A lighter-than-air airship has an exoskeleton constructed of spokes and hubs to create a set of connected hexagrams comprised of isosceles triangles wherein the spokes flex and vary in length to produce the slope of said airship's surface. In one embodiment, the exoskeleton connects to a nose cone that includes a cockpit cabin for controlling the airship's operation from a single location that can be physically separated from the exoskeleton in response to catastrophic events and for autonomous and/or remotely piloted operation. An improved means is also provided for landing and unloading cargo, and through use of unmanned aerial vehicles in another embodiment, the airship is configured for remote pickup, transport, delivery and return of payloads such as packages. In yet another embodiment, the airship provides a communications platform for beam form transmission and satellite signal relay, including in combination with the foregoing disclosed attributes.

IPC 8 full level  
**B64B 1/00** (2006.01); **B64B 1/08** (2006.01); **B64B 1/14** (2006.01); **B64B 1/18** (2006.01); **B64B 1/20** (2006.01); **B64B 1/22** (2006.01); **B64B 1/58** (2006.01); **B64B 1/66** (2006.01); **B64D 1/08** (2006.01); **B64D 5/00** (2006.01); **B64D 9/00** (2006.01); **B66F 11/04** (2006.01)

CPC (source: EP KR)  
**B64B 1/08** (2013.01 - EP KR); **B64B 1/14** (2013.01 - EP KR); **B64B 1/18** (2013.01 - EP); **B64B 1/22** (2013.01 - EP KR); **B64B 1/66** (2013.01 - EP KR); **B64C 39/024** (2013.01 - KR); **B64D 1/08** (2013.01 - EP KR); **B64D 5/00** (2013.01 - EP KR); **B64D 9/00** (2013.01 - EP KR); **B64D 17/25** (2013.01 - EP KR); **B64D 17/80** (2013.01 - EP KR); **B64D 27/353** (2024.01 - EP KR); **B64D 47/08** (2013.01 - EP KR); **B64F 1/14** (2013.01 - EP KR); **B64F 1/222** (2013.01 - EP KR); **B64U 10/30** (2023.01 - EP KR); **B64U 20/87** (2023.01 - KR); **B64U 80/82** (2023.01 - EP KR); **B64U 2101/30** (2023.01 - EP KR); **B64U 2101/60** (2023.01 - EP KR); **F05B 2260/02** (2013.01 - EP)

Citation (search report)  
• [XYI] US 2006117675 A1 20060608 - HERRMANN ROBERT M [US]  
• [XYI] US 5645248 A 19970708 - CAMPBELL J SCOTT [US]  
• [XYI] US 2019112023 A1 20190418 - BRIN SERGEY [US], et al  
• [YA] US 2014124625 A1 20140508 - BRUTOLO RINALDO [US]  
• [A] US 5704169 A 19980106 - RICHTER DONALD L [US]  
• [YA] US 2020057455 A1 20200220 - GLASS BENJAMIN WILLIAM [US], et al  
• [YDA] US 9305280 B1 20160405 - BERG PAUL WILLIAM [US], et al  
• See also references of WO 2022046064A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2022046064 A1 20220303**; AU 2020464734 A1 20230420; CA 3189683 A1 20220303; EP 4204300 A1 20230705; EP 4204300 A4 20240522; JP 2023540053 A 20230921; KR 20230061425 A 20230508; MX 2023002440 A 20230519

DOCDB simple family (application)  
**US 2020048340 W 20200828**; AU 2020464734 A 20200828; CA 3189683 A 20200828; EP 20951786 A 20200828; JP 2023513683 A 20200828; KR 20237010580 A 20200828; MX 2023002440 A 20200828