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Patent

GB2597771

Patent details

Application number	GB2012142.2
Publication number	GB2597771
Application title	Holographic light detection and ranging
Abstract title	Holographic light detection and ranging
Grant title	Holographic light detection and ranging
Abstract	<p>A light detection and ranging, LIDAR system arranged to survey a scene 125. The LIDAR system comprises a spatial light modulator 140 arranged to display a diffractive pattern comprising a hologram of a light footprint. The LIDAR system further comprises a light source 110 arranged to illuminate the spatial light modulator to form a holographic reconstruction of the light footprint on a holographic replay plane in the scene. The light footprint comprises an array of light features. The LIDAR system further comprises a display driver arranged to control the spatial light modulator and change the diffractive pattern with time. The diffractive pattern is changed with time such that each light feature of the array of light features scans a respective sub-area of the scene. The LIDAR system comprises a detection system having a plurality of light detecting elements. The detection system is configured such that each light detecting element detects light from a respective individual field of view within the scene. Each sub-area of the scene contains a plurality of individual fields of view. The light features of the projection preferably form a light spot, pattern of spots, a scanning line or plural parallel scanning lines.</p>
Status	Granted

Dates

Lodged date	5 August 2020
Filing date	5 August 2020
Publication date	9 February 2022
Date examination requested	5 August 2020
Grant date	9 January 2024
In force date	7 February 2024
Last renewal date	10 July 2025
Last renewal year	6th
Next renewal date	5 August 2026

Owners

Name	Address
Envisics Ltd	Apollo House, 6 Bramley Road, Milton Keynes, MK1 1PT, GB

Representation

The 'address for service' is the address for the owner or their representative, and is the main point of contact for the patent.

Name	Address for service
Martin Greenaway	Apollo House, 6 Bramley Road, Milton Keynes, MK1 1PT, GB

Inventors

The address has been provided for the purposes of identifying the inventor(s) and may not be up to date.

Name	Address
Timothy Smeeton	1a Garforth Place, Knowlhill, MILTON KEYNES, MK5 8PG, GB
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Documents

Documents	Date
B Pub Document OPI	7 February 2024
Outgoing Letter OPI	9 January 2024
Intention to Grant Open to Public Inspection	23 November 2023
A Publication Document OPI	9 February 2022
Outgoing Letter OPI	10 January 2022
Amendments Evidence OPI	30 September 2021
Amendments Evidence OPI	30 September 2021
Claims OPI	30 September 2021
Claims OPI	30 September 2021
Filing Receipt published with OLF	30 September 2021
Incoming Description OPI	30 September 2021
Incoming Letter published with OLF	30 September 2021
Legacy Other OPI	30 September 2021
Abstract	15 April 2021
Exam Report Letter - Out OPI	15 April 2021
External Search Report Outgoing OPI	15 April 2021
Outgoing Search and Exam OPI	15 April 2021
EPO Workshare published with OLF	12 April 2021
EPO Workshare published with OLF	12 April 2021
Abstract	5 August 2020
Claims OPI	5 August 2020
Drawings - In OPI	5 August 2020
Filing Receipt published with OLF	5 August 2020
Incoming Description OPI	5 August 2020

History

Date	Details
10 July 2025	Event Patent has been renewed on 10.07.2025 for Year 6 WIPO ST.27 category and code Full renewal or maintenance fee paid (U11)
11 July 2024	Event Patent has been renewed on 11.07.2024 for Year 5 WIPO ST.27 category and code Full renewal or maintenance fee paid (U11)
16 July 2021	Event Notification of change of Address For Service name and address of MARTIN GREENAWAY, 1a Garforth Place, Knowlhill, Milton Keynes, MK5 8PG, United Kingdom [ADP No. 12290755001] to MARTIN GREENAWAY, Apollo House, 6 Bramley Road, Milton Keynes, MK1 1PT, United Kingdom [ADP No. 12290755002] dated 23.06.2021. Written notification filed on GB2103148.9 WIPO ST.27 category and code Change to representative recorded (R17)
16 July 2021	Event Notification of change of Applicant/Proprietor address of ENVISICS LTD, 1a Garforth Place, Knowlhill, MILTON KEYNES, MK5 8PG, United Kingdom [ADP No. 12278768001] to ENVISICS LTD, Apollo House, 6 Bramley Road, Milton Keynes, MK1 1PT, United Kingdom [ADP No. 12991642001] dated 23.06.2021. Written notification filed on GB2103148.9 WIPO ST.27 category and code Changes to party contact information recorded (R18)

For more information on WIPO ST.27 categories and codes, visit <https://www.wipo.int/standards/>

Examination details

A Publication refers to a patent application being published. B Publication refers to a patent being granted.

Patent citations

Citations are earlier documents used by patent examiners to determine if the invention of this patent application is new and inventive. View the list of citations for this patent on Espacenet.

Publication stage	Publication number
A+B	US20170003392 (A1)
A+B	US20070279615 (A1)

Classifications

International Patent Classification (IPC)

The IPC is an internationally maintained patent classification scheme administered by the World Intellectual Property Organisation (WIPO). IPC classification symbols classify patents according to their different areas of technology.

Publication stage	Subclass	Subgroup	Version date	Category
A+B	G01S	7/481	1 January 2006	Invention information (First)

Cooperative Patent Classification (CPC)

The CPC is a further patent classification scheme, based on the IPC, and is maintained by the European Patent Office (EPO) and United States Patent and Trademark Office (USPTO).

Publication stage	Subclass	Subgroup	Version date	Category
A+B	G01S	7/481	1 January 2013	Invention information (First)

Field of search

This shows the databases or classification schemes where examiners have searched for this invention.

Publication stage	Searched	Codes
B	IPC	G01S
A	IPC	G01S