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(54) Title: AMPLIFICATION OF LIDAR OUTPUT SIGNALS

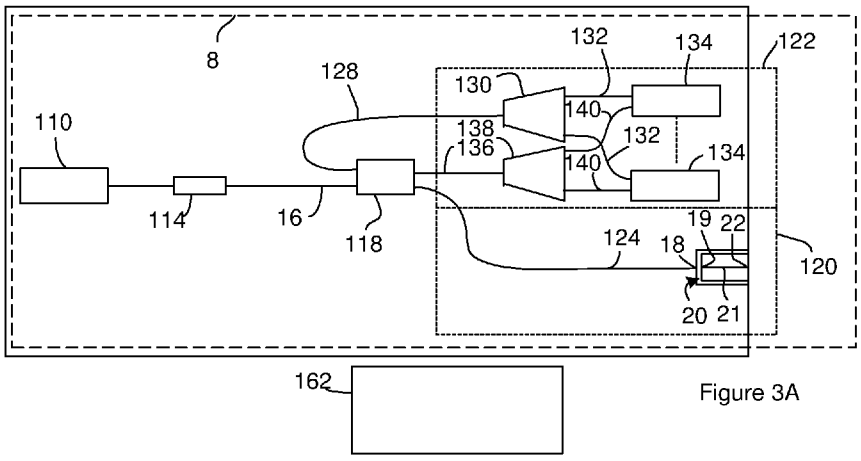

Figure 3A

(57) Abstract: A LIDAR system includes a LIDAR chip that generates a LIDAR output signal. The LIDAR chip includes a utility waveguide configured to carry one or more light signals selected from an outgoing LIDAR signal and an incoming LIDAR signal. The system also includes an amplifier that has an amplifier waveguide with a first facet and a second facet. The amplifier being positioned such that the first facet is optically aligned with a facet of the utility waveguide but the second facet is not optically aligned with any waveguide.

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011/0091155 A1 (YILMAZ et al.) 21 April 2011 (21.04.2011), Fig 1, 2D-2E, 4, para [0033]-[0034], [0039], [0044], [0055]-[0056], [0059], [0060], [0062], [0067], [0091]	1-14
Y	US 2017/0371227 A1 (SKIRLO et al.) 28 December 2017 (28.12.2017), Fig 7, para [0014], [0029], [0080]-[0081], [0096]-[0097]	1-14
Y	US 2017/0207600 A1 (BIOND PHOTONICS INC.) 20 July 2017 (20.07.2017), Fig 1, 7, 10, para [0007]-[0008], [0012], [0053], [0061]-[0062], [0064], [0075], [0082], [0084], [0101]	9, 10, 15-20
Y	US 2013/0083389 A1 (OPTICAL AIR DATA SYSTEMS, L.L.C.) 04 April 2013 (04.04.2013), Fig 1 para [0002], [0005], [0007], [0018], [0022], [0028]-[0029], [0033], [0047], [0050], [0052], [0057]	12, 15-20
Y	US 2005/0135730 A1 (WELCH et al.) 23 June 2005 (23.06.2005), Fig 7A, 65A-65B, para [0136], [0142], [0152]	13, 14, 19
Y	US 2016/0170141 A1 (ORACLE INTERNATIONAL CORPORATION) 16 June 2016 (16.06.2016), Fig 3, para [0013], [0028], [0030], [0035]	14
A, P	WO 2019/217761 A1 (SILC TECHNOLOGIES, INC.) 14 November 2019 (14.11.2019), entire document	1-20
X, E	US 2020/0284879 A1 (SILC TECHNOLOGIES, INC.) 10 September 2020 (10.09.2020), entire document	

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