





INTRODUCTION TO M SQUARED

Dr James Bain

LISA Kick-off Meeting
CERN 2/12/19

30
ACTIVE
COUNTRIES

80+
ACTIVE
PARTNERS

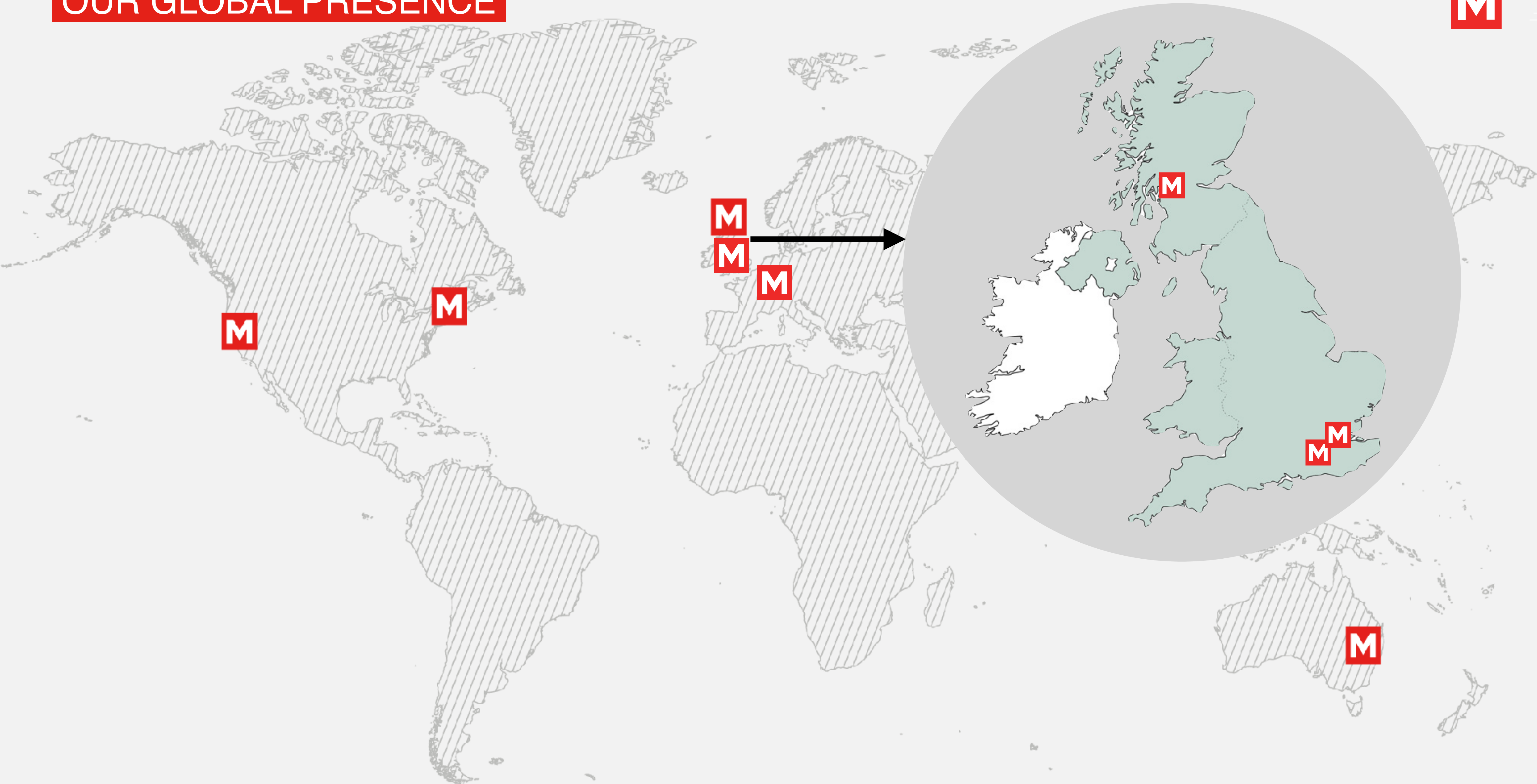
£19M
CURRENT
TURNOVER

90%
PRODUCTS
EXPORTED

380+
INDIVIDUAL
PATENTS

120
EMPLOYEES
IN 3
CONTINENTS

OUR GLOBAL PRESENCE





HQ - GLASGOW



INOVO/TIC - STRATHCLYDE



M SQUARED LIFE - SURREY



PLEXAL - EAST LONDON

COLLABORATIONS HELP REALISE TECHNOLOGY POTENTIAL



Partnerships help translate blue sky research to products.

Entrepreneurial teams accelerate commercialisation.

20+
PRODUCTS

120+
PROJECTS

100+
PARTNERS

380+
PATENTS

COLLABORATIONS AND PARTNERSHIPS



EXTENSIVE EXPERIENCE IN EU MARIE SKLODOWSKA
CURIE PROJECTS

HOSTING OF SECONDMENTS WITHIN INNOVATION
GROUP

LISA PROJECT: FOCUSED INDUSTRIAL PHD
TRAINING; ADVANCED LASER SYSTEM
DEVELOPMENT

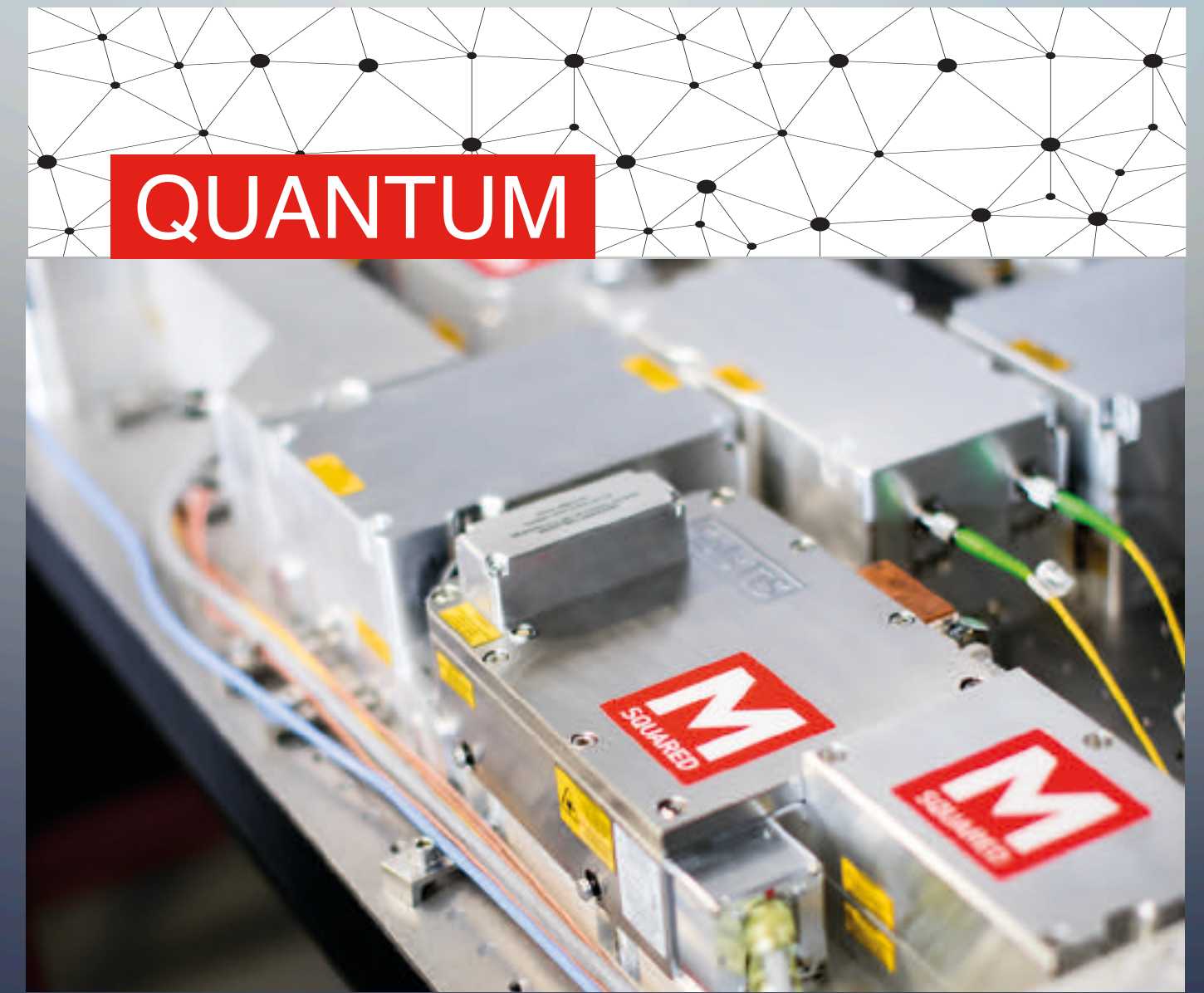
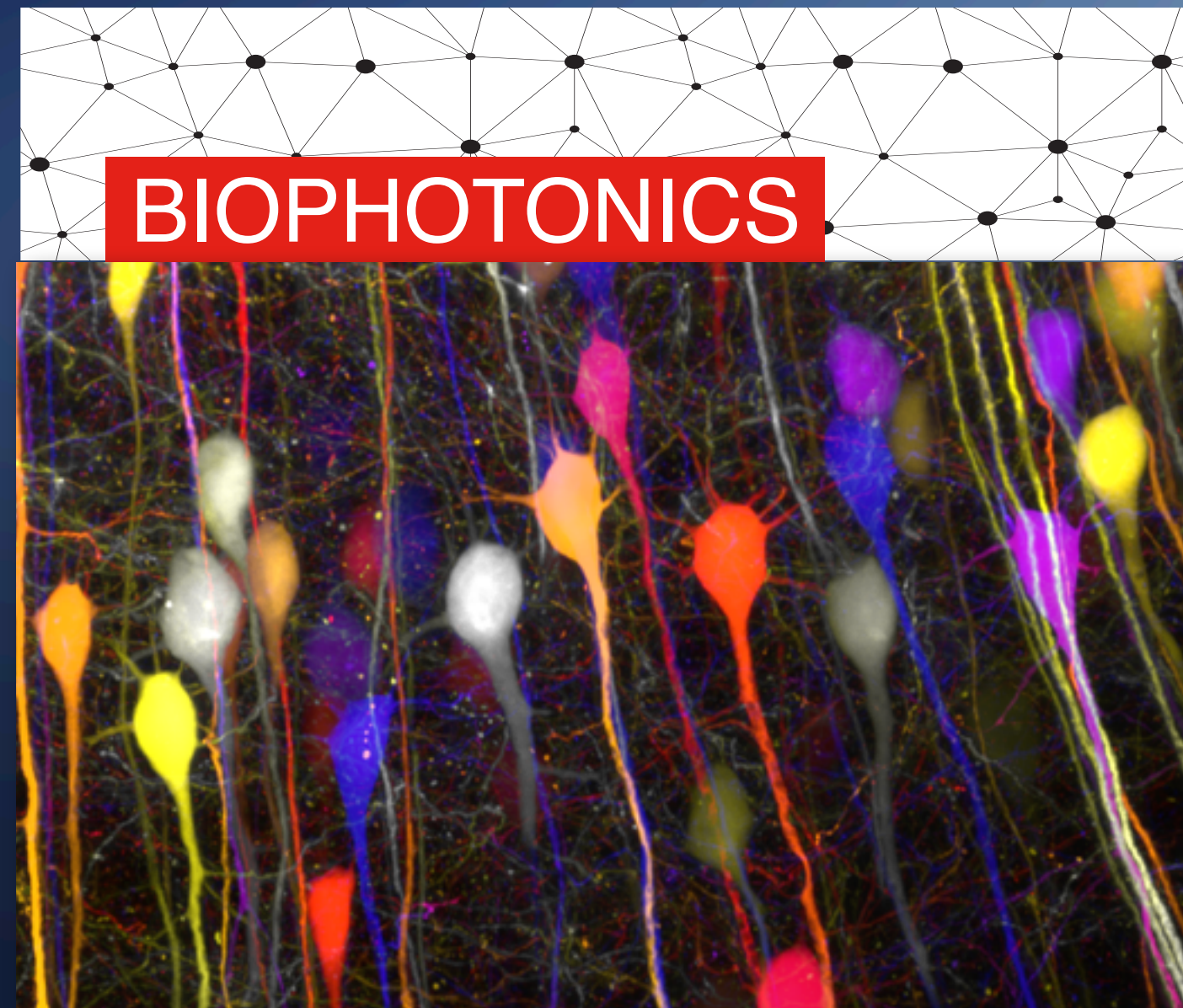
PHD AFFILIATION WITH UNIVERSITY OF
MANCHESTER



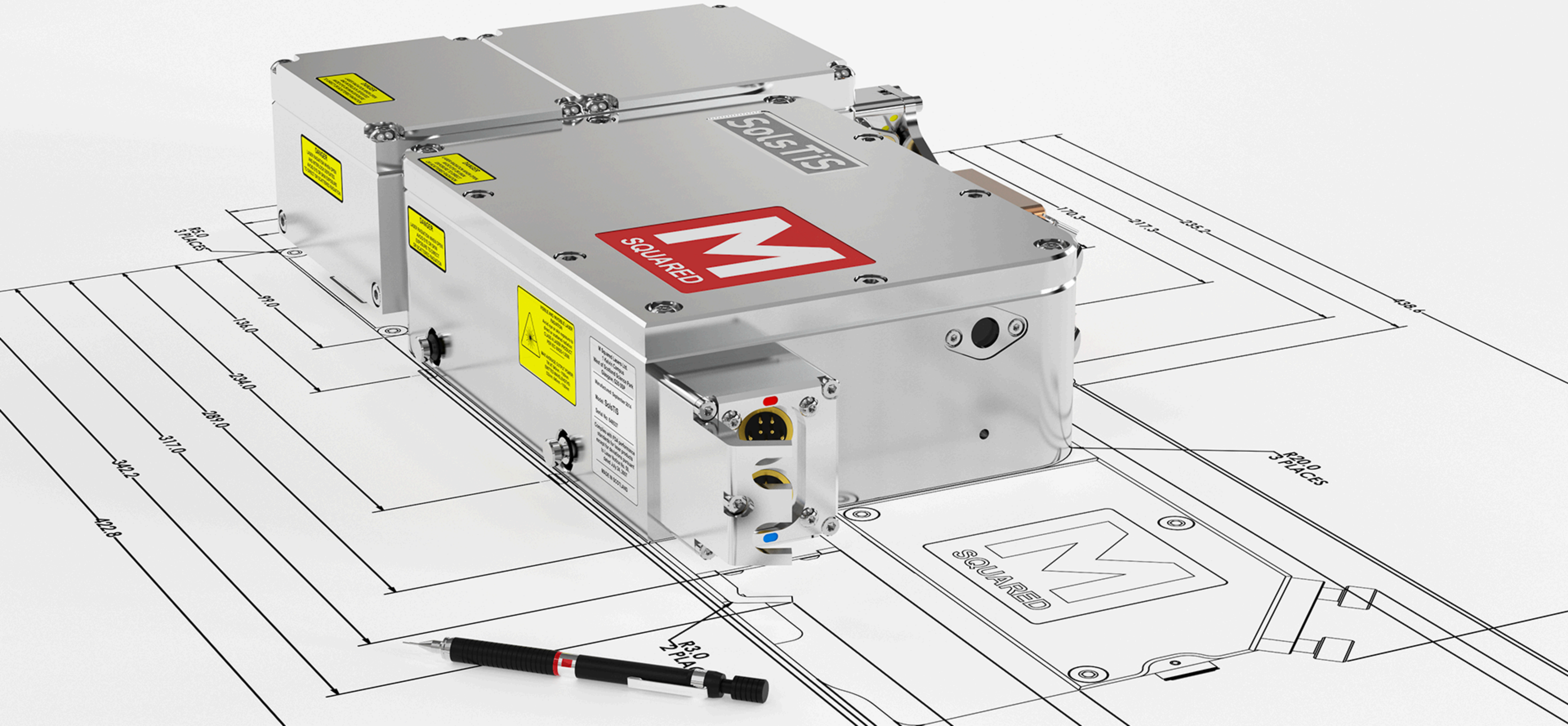
INNOVATING ACROSS THREE KEY THEMES



M Squared is growing through an innovative approach to research, open innovation and development across three key areas.



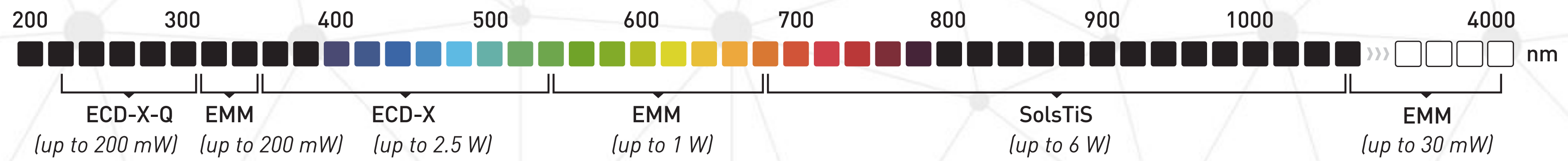
IN 2006 WE DESIGNED A TRANSFORMATIVE LASER SYSTEM



ADVANCED RESEARCH PLATFORMS



SOLSTIS
MODULAR DESIGN
210 nm - 4 μm



INVARIANT: OPTOMECHANICAL MOUNTING TECHNOLOGY



(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(10) International Publication Number

WO 2014/181116 A1

(43) International Publication Date
13 November 2014 (13.11.2014)

WIPO | PCT

(51) International Patent Classification:
G02B 6/42 (2006.01)

(74) Agent: LINCOLN IP; 9 Victoria Street, Aberdeen, Aberdeenshire AB10 1XB (GB).

(21) International Application Number:

PCT/GB2014/051413

(81) Designated States (unless otherwise indicated, for every kind of national protection available):

AF, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:

9 May 2014 (09.05.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1308433.0 10 May 2013 (10.05.2013) GB

(84) Designated States (unless otherwise indicated, for every kind of regional protection available):

ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MOUNTING OPTICAL COMPONENTS

(57) Abstract: A method and apparatus for mounting optical components is described. The apparatus (1) is suitable for mounting multiple optical components (2) and comprises a baseplate (3) having opposing first (4) and second (5) surfaces. Recesses or apertures (7) are formed within the baseplate and are located upon the first or second surfaces so as to define thermally activated optic mounting areas. Pillars (13) are then located within the thermally activated optic mounting areas and these provide a means for attaching the optical component to the baseplate (3). The employment of the recesses or apertures act to significantly reduce the thermal conduction throughout the baseplate. As a result preferential heating can be provided to the one or more thermally activated optic mounting areas while maintaining the baseplate with a desired mechanical strength. The optical mounting apparatus exhibits

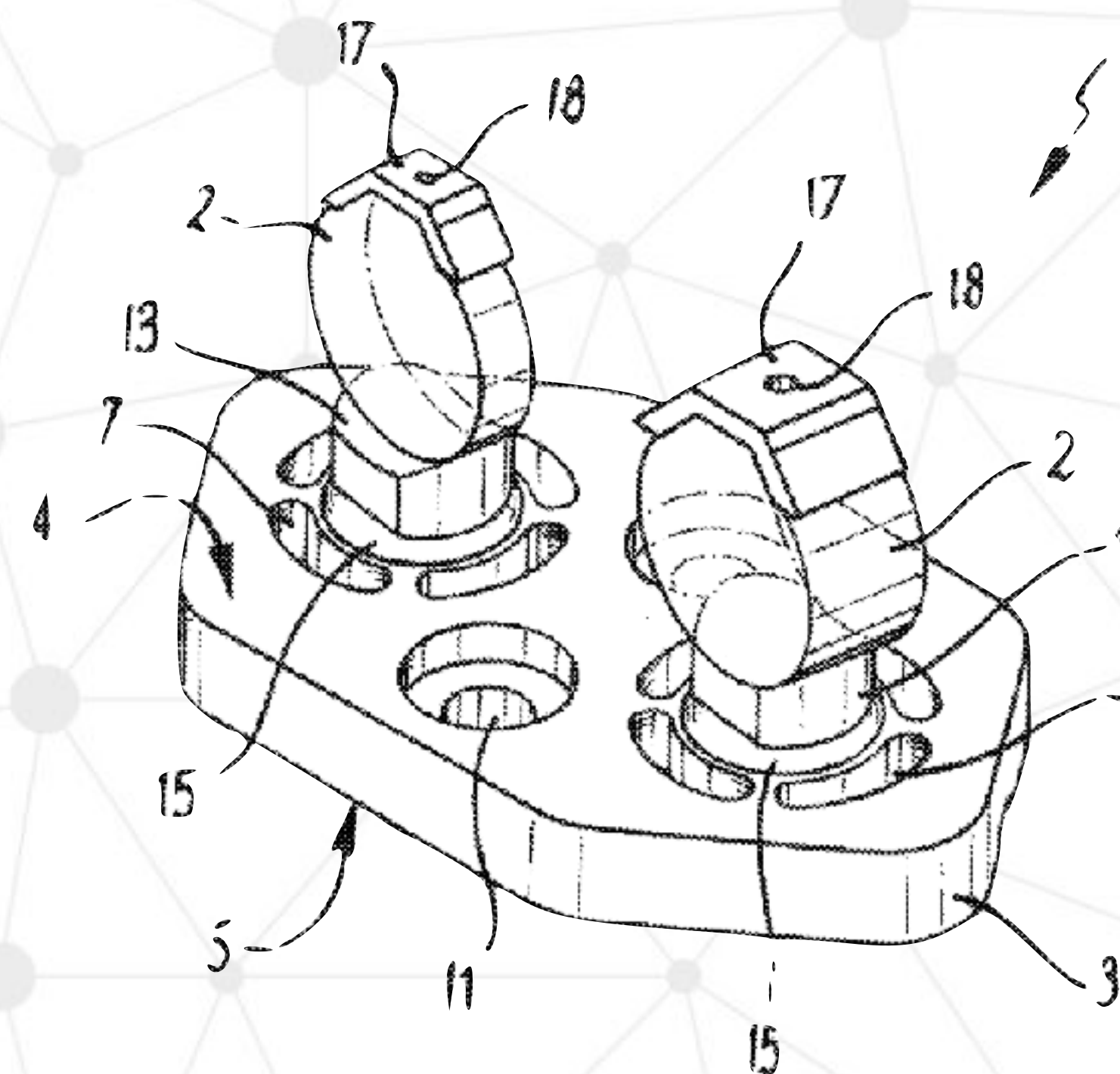
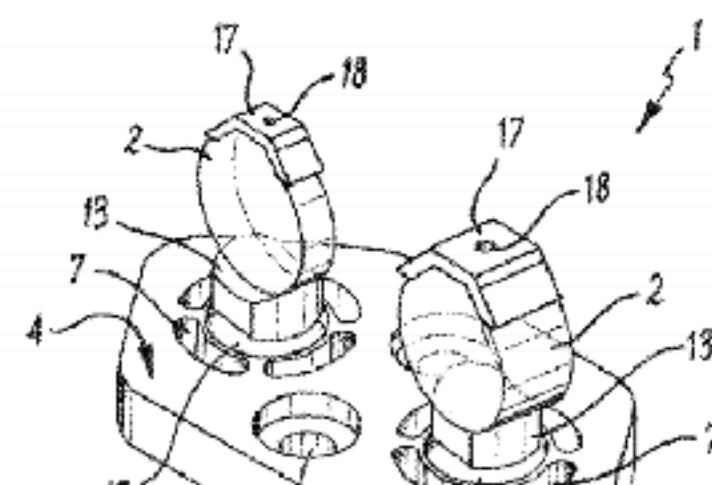


Fig. 1

ICE BLOC: ELECTRONIC INSTRUMENT AND SYSTEM CONTROL



ADVANCED ANALOGUE AND DIGITAL LASER DRIVE,
LOCK AND CONTROL ELECTRONICS

ETHERNET CONTROL; BROWSER-BASED USER
INTERFACE



INDUSTRIAL LASERS FOR ADVANCED MANUFACTURING



ADVANCED SPECTROSCOPY PLATFORMS - SENTINEL 5 SATELLITE

