UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Petitioner, GE Healthcare, Ltd.

v.

Johns Hopkins University,
Patent Owner.

Case No. PGR2025-00059
U.S. Patent No. 12,115,233

PETITIONER'S EXHIBIT LIST

EXHIBIT LIST

No.	Exhibit Description	Short Name
1001	U.S. Patent No. 12,115,233	US-233
1002	File History of U.S. Patent No. 12,115,233	US-233 FW
1003	Declaration of Dr. Brian Zeglis	Zeglis I
1004	U.S. Patent Publication 2010/0098633	US-633
1005	U.S. Patent Publication 2012/0009121	US-121
1006	Jansen et al., "Extended Structure−Activity Relationship and Pharmacokinetic Investigation of (4-Quinolinoyl)glycyl-2-cyanopyrrolidine Inhibitors of Fibroblast Activation Protein (FAP)," J. Med. Chem, 57:3053–3074 (2014)	Jansen
1007	Jansen et al., "Selective Inhibitors of Fibroblast Activation Protein (FAP) with a (4-Quinolinoyl)-glycyl-2-cyanopyrrolidine Scaffold," ACS Med. Chem. Lett., 4:491–496 (2013)	Jansen 2013
1008	Meletta et al., "Evaluation of the Radiolabeled Boronic Acid-Based FAP Inhibitor MIP-1232 for Atherosclerotic Plaque Imaging," Molecules, 20:2081–2099 (2015)	Meletta
1009	Jamous et al., "Synthesis of Peptide Radiopharmaceuticals for the Therapy and Diagnosis of Tumor Diseases," Molecules, 18:3379–3409 (2013)	Jamous
1010	Zeglis et al., "A practical guide to the construction of radiometallated bioconjugates for positron emission tomography," Dalton Trans., 40(23):6168–6195 (2011)	Zeglis 2011
1011	Zeglis et al., "Underscoring the Influence of Inorganic Chemistry on Nuclear Imaging with Radiometals," Inorg. Chem., 53:1880–1889 (2013)	Zeglis 2013

No.	Exhibit Description	Short Name
1012	Wadas et al., "Coordinating Radiometals of Copper, Gallium, Indium, Yttrium, and Zirconium for PET and SPECT Imaging of Disease," Chem. Rev., 110(5):2858–2902 (2010)	Wadas
1013	Price et al., "Matching chelators to radiometals for radiopharmaceuticals," Chem. Soc. Rev., 43:260–290 (2014)	Price
1014	Riondato et al., "Radiopharmaceuticals," Chapter 4, 31-57, in *PET-CT and PET-MRI in Neurology* (Ciarmiello and Mansi, editors), Springer, Int. Publ., (2016)	Riondato
1015	Ross, "The Click Chemistry Approach Applied to Fluorine-18," Current Radiopharmaceuticals, 3:202–223 (2010)	Ross
1016	Brennen et al., "Rationale Behind Targeting Fibroblast Activation Protein–Expressing Carcinoma-Associated Fibroblasts as a Novel Chemotherapeutic Strategy," Mol. Cancer Ther., 11(2):257–266 (2012)	Brennen 2012
1017	Sarko et al., "Bifunctional Chelators in the Design and Application of Radiopharmaceuticals for Oncological Diseases," Current Medicinal Chem., 19:2667–2688 (2012)	Sarko
1018	Fichna et al., "Synthesis of Target-Specific Radiolabeled Peptides for Diagnostic Imaging," Bioconjugate Chem., 14:3–17 (2003)	Fichna
1019	Schirrmacher et al., "Small Prosthetic Groups in ^{18}F-Radiochemistry: Useful Auxiliaries for the Design of ^{18}F-PET Tracers," Semin. Nucl. Med., 47(5):474–492 (August 2017)	Schirrmacher
1020	Saha et al., "Synthesis of PET Radiopharmaceuticals," Chapter 8, 161-168, in *Basics of PET Imaging* (Saha, editor), Springer Int. Publ., (2010)	Saha

No.	Exhibit Description	Short Name
1021	Kettenbach et al., "^{18}F-Labeling Using Click Cycloadditions," BioMed Research International, 2014:1–16 (2014)	Kettenbach
1022	Liu et al., "Fibroblast activation protein, A potential therapeutic target in cancer," Cancer Biology & Ther., 13(3):123–129 (2012)	Liu
1023	DiMagno et al., "Advanced Fibroblast Activation Protein-Ligand Developments, FAP Imaging Agents: A Review of the Structural Requirements," PET Clin., 18:287–294 (2023)	DiMagno
1024	Hamson et al., "Understanding fibroblast activation protein (FAP): Substrates, activities, expression and targeting for cancer therapy," Proteomics Clin. Appl., 8:454–463 (2014)	Hamson
1025	O'Brien et al., "Seprase: An overview of an important matrix serine protease," Biochimica et Biophysica Acta, 1784:1130–1145 (2008)	O'Brien
1026	Jia et al., "FAP-α (Fibroblast activation protein-α) is involved in the control of human breast cancer cell line growth and motility via the FAK pathway," BMC Cell Biology, 15(16): 1–14 (2014)	Jia
1027	Agdeppa et al., "A Review of Imaging Agent Development," The American Association of Pharmaceutical Scientists (AAPS) J., 11(2):286–299 (2009)	Agdeppa
1028	Mankoff et al., "Tumor Receptor Imaging," J. Nucl. Med., 49:149S–163S (2008)	Mankoff
1029	Ryabtsova et al., "Acylated Gly-(2-cyano)pyrrolidines as inhibitors of fibroblast activation protein (FAP) and the issue of FAP/prolyl oligopeptidase (PREP)-selectivity," Bioorganic & Medicinal Chemistry Letters, 22(10):3412–3417 (2012)	Ryabtsova

No.	Exhibit Description	Short Name
1030	Eder et al., "^{68}Ga-Complex Lipophilicity and the Targeting Property of a Urea-Based PSMA Inhibitor for PET Imaging," Bioconjugate Chem., 23:688–697 (2012)	Eder
1031	File History of U.S. Patent No. 11,938,201	US-201 FW
1032	Fani et al., "Radiolabeled Peptides: Valuable Tools for the Detection and Treatment of Cancer," Theranostics, 2(5):481–501 (2012)	Fani
1033	Mach et al., "Challenges for Developing PET Tracers: Isotopes, Chemistry, and Regulatory Aspects," 5(2): 131–153 (2010)	Mach
1034	Meyer et al., "Click Chemistry and Radiochemistry: The First 10 Years," Bioconjugate Chem., 27:2791–2807 (2016)	Meyer 2016
1035	Marquis et al., "Abstract #4467: Targeting tumor microenvironment with radiolabeled inhibitors of seprase (FAP\#945;)," Cancer Chem., 69:4467 (2009)	Marquis
1036	Maurer et al., "Current use of PSMA-PET in prostate cancer management," Nature Reviews: Urology, 13:226–235 (2016)	Maurer
1037	Karakatsanis et al., "Dosage optimization in positron emission tomography: state-of-the-art methods and future prospects," Am. J. Nucl. Med. Mol. Imaging, 5(5):527–547 (2015)	Karakatsanis
1038	LeBeau et al., "Targeting the cancer stroma with a fibroblast activation protein-activated promelittin protoxin," Mol. Cancer Ther. 8(5):1378–1386 (2009)	LeBeau
1039	Nelson et al., "Good practices for ^{68}Ga radiopharmaceutical production," EJNMMI Radiopharmacy and Chem., 7(1):1–26 (2022)	Nelson

No.	Exhibit Description	Short Name
1040	Meyer et al., "Exploring Structural Parameters for Pretargeting Radioligand Optimization," J. Med. Chem., 60:8201–8217 (2017)	Meyer 2017
1041	Gorrell, "Dipeptidyl peptidase IV and related enzymes in cell biology and liver disorders," Clinical Science, 108:1–16 (2005)	Gorrell
1042	Kiesewetter et al., "Automated radiochemical synthesis of [^{18}F]FBEM: A thiol reactive synthon for radiofluorination of peptides and proteins," Appl. Radiation and Isotopes, 69(2): 410–414 (2011)	Kiesewetter
1043	Chansaenpak et al., "[^{18}F]-NHC-BF_3 adducts as water stable radio-prosthetic groups for PET imaging," Chem. Commun., 51(62):12439–12442 (2015)	Chansaenpak
1044	U.S. Patent Publication 2014/0357650	US-650
1045	Ji et al., "Tumor fibroblast specific activation of a hybrid ferritin nanocage-based optical probe for tumor microenvironment imaging," Small J., 9(14):2427–2431 (2013)	Ji
1046	Wilson et al., "Chapter 1, Dipeptidyl Peptidases: Substrates and Therapeutic Targeting in Human Health and Disease," Royal Society of Chemistry, (2012)	Wilson
1047	Tsai et al., "Substituted 4-carboxymethylpyroglutamic Acid Diamides as Potent and Selective Inhibitors of Fibroblast Activation Protein," J. Med. Chem. 53(18):6572–6583 (2010)	Tsai
1048	International Publication 2010/108125	US-121 PCT
1049	US 12,115,233 Provisional application No. 62/575,607	US-607
1050	Billaud et al., "Development and Preliminary Evaluation of TFIB, a New Bimodal	Billaud

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	Prosthetic Group for Bioactive Molecule Labeling," ACS Med. Chem. Lett. 6(2):168–172 (2015)	
1051	Harris et al., "Impact of 2-Deoxy-2[F-18]Fluoro-D-Glucose Positron Emission Tomography on the Management of Patients with Advanced Melanoma," Mol. Imaging Biol., 7(4):304–308 (2005)	Harris
1052	Zhou et al., "Radiolabeled Cyclic RGD Peptides as Radiotracers for Imaging Tumors and Thrombosis by SPECT," Theranostics, 1:58–82 (2011)	Zhou
1053	U.S. Patent Publication 2011/0064657	US-657
1054	Kim et al., "Synthesis and the structure of mixed carboxylatoplatinum(IV) complexes involving one trifluoroacetate ligand," Inorganica Chimica Acta, 358(2):415–418 (2005)	Kim
1055	Pruszynski et al., "Improved Tumor Targeting of Anti-HER2 Nanobody Through *N*-Succinimidyl 4-Guanidinomethyl-3-Iodobenzoate Radiolabeling," Journal of Nuclear Medicine, 55(4):650–656 (2014)	Pruszyinski
1056	Declaration of Jeffrey P. Kushan	Kushan Dec.
1057	PCT/US2022/023374	Pomper PCT
1058	Email Correspondence re: Pomper Declaration Discovery (Apr. 22, 2026 – May 4, 2026)	Pomper Discovery Emails
1059 – 1061	*Reserved*	
1062	Declaration of Amit Bhatla	
1063	Errata to Declaration of Dr. Henry VanBrocklin	VanBrocklin Errata

No.	Exhibit Description	Short Name
1064	Fulop et al., "Prolyl Oligopeptidase: An Unusual β-Propeller Domain Regulates Proteolysis," Cell, 94:161–170 (1998)	Fulop
1065	Ganguly et al., "A high-affinity [^{18}F]-labeled phosphoramidate peptidomimetic PSMA-targeted inhibitor for PET imaging of prostate cancer," Journal of Nuclear Medicine and Biology, 42:780–787 (2015)	Ganguly
1066	Dannoon et al., "Structure—Activity Relationship of ^{18}F-Labeled Phosphoramidate Peptidomimetic Prostate-Specific Membrane Antigen (PSMA)-Targeted Inhibitor Analogues for PET Imaging of Prostate Cancer," Journal of Medicinal Chemistry, 59:5684–5694 (2016)	Dannoon
1067	Dr. VanBrocklin Annotation of XY-FAP-01	XY-FAP-01
1068	Dr. VanBrocklin Annotation of XY-FAP-02	XY-FAP-02
1069	Transcript of the Deposition of Dr. Henry VanBrocklin, July, 29, 2026	VanBrocklin Tr.
1070	Second Declaration of Dr. Brian Zeglis	Zeglis II
1071	Johns Hopkins Production Records	JHU Production
1072	Frangioni, "In vivo near-infrared fluorescence imaging," Current Opinion in Chemical Biology, 7:626–634 (2003)	Frangioni
1073	Polgar, "The Prolyl oligopeptidase family," Cellular and Molecular Life Sciences, 59:349–362 (2002)	Polgar
1074	Arruebo et al., "Assessment of Evolution of Cancer Treatment Therapies," Cancers, 3:3279–3330 (2011)	Arruebo
1075	FDA and EMA Access Data	FDA and EMA Data

No.	Exhibit Description	Short Name
1076	Walsh et al., "Biopharmaceutical benchmarks 2022," Nature Biotechnology, 40:1722-1760 (2022)	Walsh
1077	Huang et al., "The Synthesis and Structural Requirements for Measuring Glucocorticoid Receptor Expression In Vivo with ± ^{11}C-YJH08 PET," Journal of Nuclear Medicine, 62:(5) 723–731 (2020)	Huang
1078	Vasdev et al., "Metabolic stability of 6,7-dialkoxy-4-(2-, 3- and 4-[^{18}F]fluoroanilino)quinazolines, potential EGFR imaging probes," Bioorganic & Medicinal Chemistry, 19:2959–2965 (2011)	Vasdev
1079	Su et al., "Evaluation of [^{18}F]getfitinib as a molecular imaging probe for the assessment of the epidermal growth factor receptor status in malignant tumors," European Journal of Nuclear Medicine and Molecular Imaging, 35:1089–1099 (2008)	Su
1080	BPS Bioscience Inc., FAP His-Tag Recombinant FAP 80100, https://bpsbioscience.com/fap-his-tag-recombinant-80100	BPS FAP Assay
1081	Biotechne R&D Systems, Recombinant Human Fibroblast Activation Protein α/FAP Catalog Number 3715-SE, https://bio-tehche.com/p/proteins-enzymes/recombinant-human-fap-protein-cf_3715-se#product-specifications	R&D FAP Assay
1082	Baker et al., "Influence of fluorophore and linker composition on the pharmacology of fluorescent adenosine A1 receptor ligands," British Journal of Pharmacology, 159:772-786 (2010)	Baker
1083	PREP Tissue, The Human Protein Atlas, https://www.proteinatlas.org/ENSG00000085377-PREP/tissue	Protein Atlas

No.	Exhibit Description	Short Name
1084	Second Declaration of Kushan	Kushan Dec. II

Dated: August 20, 2026

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on this this 20th day of August, 2026, I caused to be served a true and correct copy of the foregoing and any accompanying exhibits by electronic mail on the following counsel:

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