INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Form PTO/SB/08a)

Application Number: [TO BE ASSIGNED]

Filing Date: [CURRENT DATE]

First Named Inventor: Brian James Rutherford

Art Unit: [TO BE ASSIGNED]

Examiner: [TO BE ASSIGNED]

Attorney Docket No: RUTHERFORD-013_PROV

Title of Invention:

Federated Quantum Threat Intelligence Network with Privacy-Preserving Multi-Organization Protocols, Zero Trust Architecture, Quantum-Verified Incident Response with Optimized Latency, and Quantum Homomorphic Encryption

U.S. PATENT DOCUMENTS

Note: To be supplemented during prosecution

Examiner Cite No.	Patent Number	Kind Code	Issue Date	Name of Patentee or Applicant	Pages, Columns, Lines Referenced

☐ None cited at this time

FOREIGN PATENT DOCUMENTS

Note: To be supplemented during prosecution

Examiner Cite No.	Publication Number	Kind Code	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines Referenced	T

☐ None cited at this time

NON-PATENT LITERATURE DOCUMENTS

Examiner Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, etc.), date, pages, volume-issue number(s), publisher, city and/or country where published	T
NPL-1	BENNETT, C.H. and BRASSARD, G., "Quantum cryptography: Public key distribution and coin tossing," Proceedings of IEEE International Conference on Computers, Systems and Signal Processing, December 1984, pp. 175-179, IEEE, Bangalore, India	
NPL-2	BROADBENT, A. and JEFFERY, S., "Quantum homomorphic encryption for circuits of low T-gate complexity," CRYPTO 2015, Lecture Notes in Computer Science, vol. 9216, pp. 609-629, 2015, Springer, Berlin	
NPL-3	DULEK, Y., et al., "Quantum homomorphic encryption for polynomial-sized circuits," CRYPTO 2016, Lecture Notes in Computer Science, vol. 9816, pp. 3-32, 2016, Springer, Berlin	

Examiner Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, etc.), date, pages, volume-issue number(s), publisher, city and/or country where published	T
NPL-4	MAHADEV, U., "Classical Homomorphic Encryption for Quantum Circuits," SIAM Journal on Computing, FOCS 2018 Special Issue, pp. 189-215, 2020, SIAM, Philadelphia	
NPL-5	NIST, "Post-Quantum Cryptography Standards," Federal Information Processing Standards Publication, FIPS 203, 204, 205, August 2024, National Institute of Standards and Technology, Gaithersburg, MD	
NPL-6	ETSI, "Quantum Key Distribution (QKD); Implementation Security: Protection Profile," ETSI GS QKD 016 V1.1.1, 2023, European Telecommunications Standards Institute, Sophia Antipolis, France	
NPL-7	BEN-OR, M. and HASSIDIM, A., "Fast quantum byzantine agreement," Proceedings of the 37th Annual ACM Symposium on Theory of Computing (STOC), pp. 481-485, 2005, ACM, New York	
NPL-8	GROVER, L.K., "A fast quantum mechanical algorithm for database search," Proceedings of the 28th Annual ACM Symposium on Theory of Computing, pp. 212-219, 1996, ACM, Philadelphia	
NPL-9	SHOR, P.W., "Algorithms for quantum computation: discrete logarithms and factoring," Proceedings of the 35th Annual Symposium on Foundations of Computer Science, pp. 124-134, 1994, IEEE, Santa Fe	
NPL-10	EINSTEIN, A., PODOLSKY, B., and ROSEN, N., "Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?" Physical Review, vol. 47, pp. 777-780, 1935, American Physical Society	

EXAMINER'S SIGNATURE AND CONSIDERATION

Examiner Signature: _____ **Date Considered:** _____

APPLICANT'S CERTIFICATION

/Brian James Rutherford/ hereby certifies that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

I hereby state that all information known to me to be material to patentability is being disclosed in accordance with 37 CFR 1.56.

Signature: /Brian James Rutherford/
Date: [CURRENT DATE]

NOTES

1. This Information Disclosure Statement is being submitted with the provisional patent application filing.
2. Additional references may be submitted during the pendency of any non-provisional application claiming priority to this provisional application.
3. No fee is required for IDS submission with initial filing.

END OF INFORMATION DISCLOSURE STATEMENT