US 20240214123A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0214123 A1**

QIAN et al. (43) **Pub. Date: Jun. 27, 2024**

(54) **DYNAMICALLY CONFIGURING RETRY POLICIES OF NETWORK FUNCTIONS**

(71) Applicant: **Microsoft Technology Licensing, LLC**, Redmond, WA (US)

(72) Inventors: **Haibo QIAN**, Frisco, TX (US); **Mark Gordon LIBBY**, Groton, MA (US); **Michael Anthony BROWN**, McKinney, TX (US); **Ronald Mark PARKER**, Manchester, MA (US); **Rahul BOSE**, Westford, MA (US)

(21) Appl. No.: **18/087,457**

(22) Filed: **Dec. 22, 2022**

Publication Classification

(51) **Int. Cl.**

H04L 1/18	(2006.01)
H04W 28/04	(2006.01)

(52) **U.S. Cl.**

CPC ***H04L 1/18*** (2013.01); ***H04W 28/04*** (2013.01)

(57) **ABSTRACT**

The present disclosure relates to systems, methods, and computer-readable media for configuring a network function in a core network of a telecommunications environment. For example, systems described herein involve collecting transmission data including timing and success/failure data for use in generating a retry policy that includes rules and instructions that govern transmission of retries between computing nodes. Once generated, the retry policy may be applied to message packages by selectively transmitting message retries based on specific timing delays that are determined from the collected transmission data. This generation and implementation of the retry policy may improve the latency and success rate of messages transmitted by computing nodes within a core network architecture, thereby improving network conditions in a variety of ways.