



US 20240214257A1

(19) **United States**

(12) **Patent Application Publication**  
**SHRIWAS et al.**

(10) **Pub. No.: US 2024/0214257 A1**

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

(54) **DYNAMIC APPLICATION OF SCHEMA  
FRAMEWORK FOR INVENTORY  
MANAGEMENT**

**Publication Classification**

(51) **Int. Cl.**  
**H04L 41/044** (2006.01)  
**H04L 41/0853** (2006.01)  
(52) **U.S. Cl.**  
**CPC ..... H04L 41/044** (2013.01); **H04L 41/0853**  
(2013.01)

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(21) Appl. No.: **17/911,566**

(22) PCT Filed: **Jun. 23, 2022**

(86) PCT No.: **PCT/US2022/034631**

§ 371 (c)(1),

(2) Date: **Dec. 28, 2023**

(57) **ABSTRACT**

This disclosure provides methods, apparatuses, and computer-readable mediums for managing network devices in a telecommunication network using a graph data schema may be provided. the method may include retrieving, from a database, an entity model specification associated with a network device being deployed; determining whether a base model associated with the entity model specification is supported; adding one or more vertex node labels in the graph data schema based on the name, the type of network device, and the version in the entity model specification; adding one or more characteristic nodes in the graph data schema based on one or more characteristics; adding one or more edges in the graph data schema on the one or more relationships in the entity model specification; and based on no error being generated, activating the graph data schema to manage the network device being deployed in the telecommunication network.

