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(54) **HIGH-SPEED NETWORK PACKET PAYLOAD INSPECTION SYSTEM BASED ON EBPF (EXTENDED BERKELEY PACKET FILTER)/XDP (EXPRESS DATA PATH) FOR CONTAINER ENVIRONMENT**

(71) Applicants: **KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY**, Daejeon (KR); **S2W INC.**, Seongnam-si (KR)

(72) Inventors: **Seung Won SHIN**, Daejeon (KR); **Myoung Sung YOU**, Daejeon (KR); **Sang Duk SUH**, Seongnam-si (KR); **Chang Hoon YOON**, Seongnam-si (KR); **Yeon Keun KIM**, Yongin-si (KR)

(73) Assignees: **KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY**, Daejeon (KR); **S2W INC.**, Seongnam-si (KR)

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(57) **ABSTRACT**

According to the present specification, a method for inspecting a high-speed network packet payload by a terminal includes: a step of receiving L7 (Layer 7) policy related to containers from a user; a step of extracting string patterns to be inspected for each of the containers on the basis of the L7 policy through a pattern compiler; a step of creating a deterministic finite automaton (DFA) on the basis of the extracted string patterns through the pattern complier; and a step of converting a state transition table of the deterministic finite automaton into a match-action table through the pattern compiler and storing the match-action table in an eBPF (extended Berkeley Packet Filter) map for a payload inspection engine.