US 20240214234A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0214234 A1

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

(54) **MULTICAST SIGNAL PROCESSING METHOD AND DEVICE**

(71) Applicant: **LG ELECTRONICS INC.**, Seoul (KR)

(72) Inventors: **Woosuk KWON**, Seoul (KR); **Joonhee YOON**, Seoul (KR)

(73) Assignee: **LG ELECTRONICS INC.**, Seoul (KR)

(21) Appl. No.: **18/557,001**

(22) PCT Filed: **Apr. 18, 2022**

(86) PCT No.: **PCT/KR2022/005536**

§ 371 (c)(1),
(2) Date: **Oct. 24, 2023**

Related U.S. Application Data

(60) Provisional application No. 63/187,867, filed on May 12, 2021.

(30) **Foreign Application Priority Data**

Jul. 29, 2021 (KR) 10-2021-0100078

Publication Classification

(51) **Int. Cl.**

H04L 12/18	(2006.01)
H04L 69/04	(2022.01)
H04L 69/14	(2022.01)

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

CPC ***H04L 12/184*** (2013.01); ***H04L 69/04*** (2013.01); ***H04L 69/14*** (2013.01)

(57) **ABSTRACT**

A multicast signal transmission method, according to the embodiments, may comprise the steps of: receiving Internet Protocol (IP) streams from an upper layer; compressing, at a link layer, IP headers of the IP streams; generating link control information for link layer-related multicast; encapsulating IP header-compressed Robust Header Compression (ROHC) streams; encapsulating the link control information and an IP header compression-related descriptor; and transmitting, in a physical layer, a stream including the link control information, the descriptor and the ROHC streams. A multicast signal reception method, according to the embodiments, comprises the steps of: receiving a multicast signal from a physical layer; decompressing, at a link layer, IP headers of IP streams of the multicast signal; and parsing link control information for multicast, and an IP header compression-related descriptor, wherein IP header-compressed ROHC streams may be decapsulated.