

EXHIBIT 3



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Thang et al.

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(45) **Date of Patent:** ***Jul. 16, 2019**

(54) **METHOD AND DEVICE FOR PROVIDING STREAMING CONTENT**

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(73) Assignee: **IDEAHUB, INC.**, Seoul (KR)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

(63) Continuation of application No. 15/785,275, filed on Oct. 16, 2017, now Pat. No. 10,178,142, which is a (Continued)

(30) **Foreign Application Priority Data**

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

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(58) **Field of Classification Search**

CPC combination set(s) only.

See application file for complete search history.

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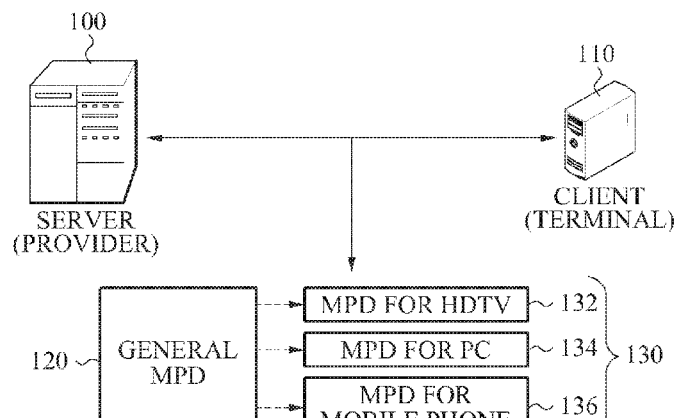
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(57) **ABSTRACT**

A method and apparatus for an adaptive Hypertext Transfer Protocol (HTTP) streaming service using metadata of content are provided. The metadata of the content may be efficiently divided for a purpose of use of a terminal based on general media information or specific media information, and may be transmitted to the terminal. A group may include one or more representations of content. The metadata may include a group element, and the group element may provide a summary of attributes of one or more representations included in the group.

20 Claims, 7 Drawing Sheets



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Related U.S. Application Data

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H04N 21/262 (2011.01)
H04N 21/658 (2011.01)
H04N 21/643 (2011.01)
H04N 21/6437 (2011.01)

(52) U.S. Cl.

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FIG. 1

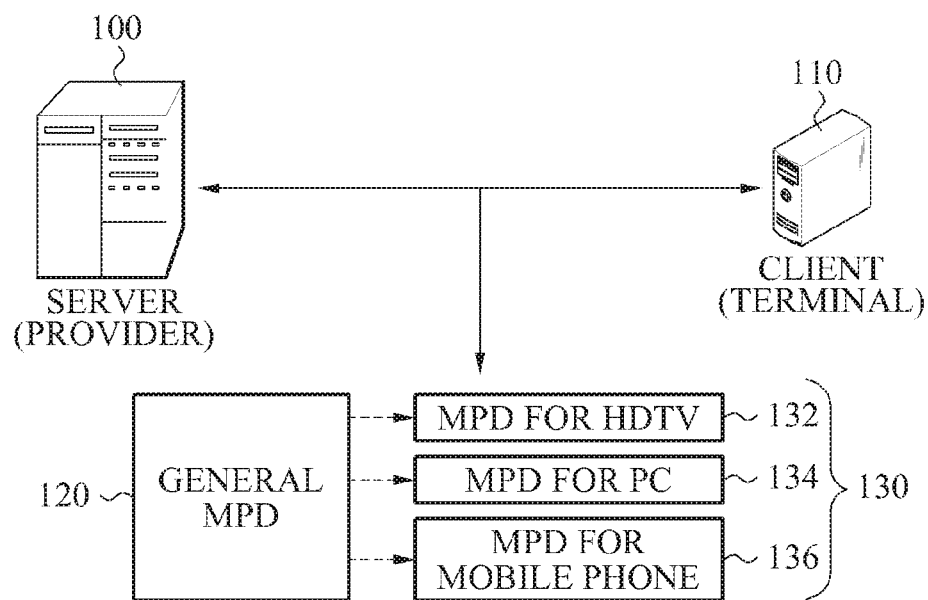
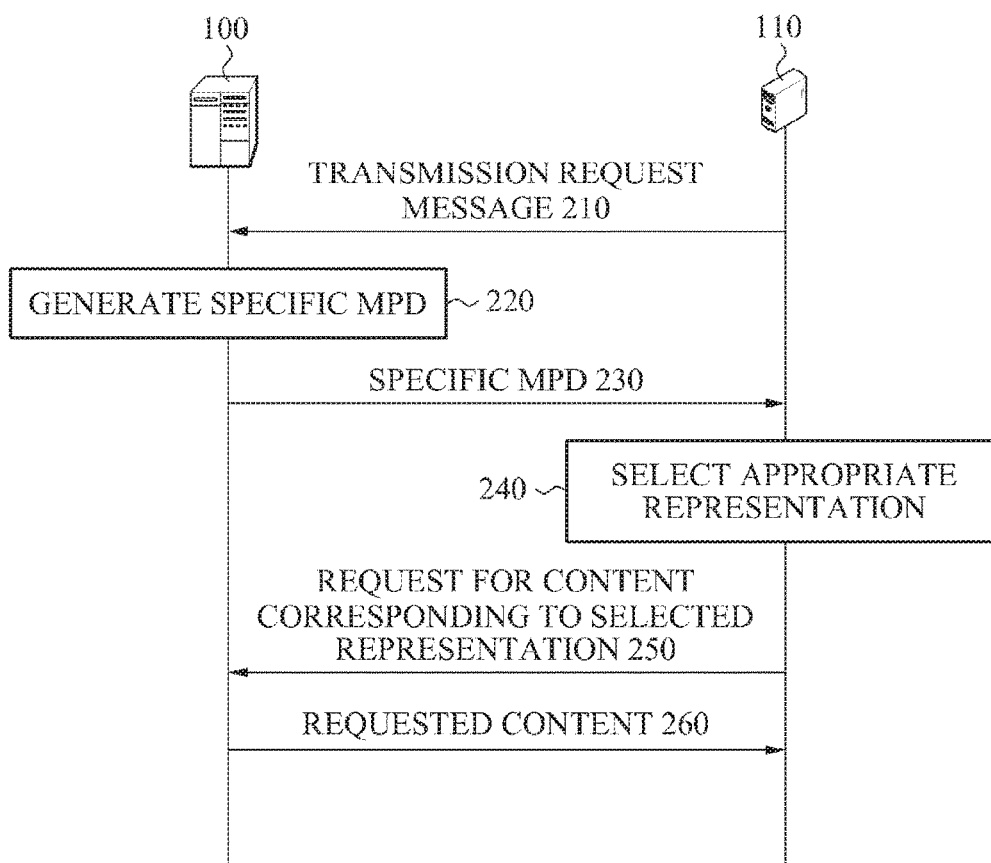


FIG. 2



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