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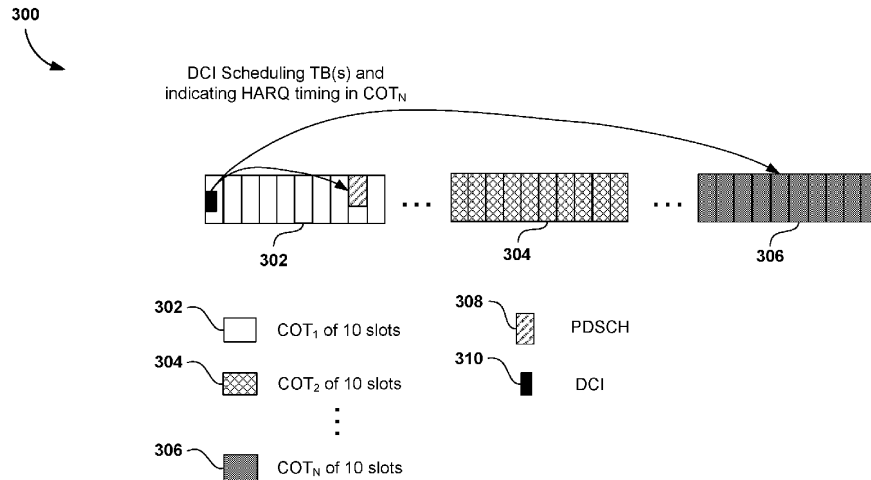


FIG. 3A

(57) **Abstract:** Method, apparatus, and systems for hybrid automatic repeat request (HARQ) enhancement in wireless communications are disclosed. In one representative embodiment, a method implemented in a wireless transmit/receive unit (WTRU) for wireless communications includes identifying a codebook process from a set of codebook processes based on a first indication, associating a set of bits of hybrid automatic repeat request (HARQ) feedback with the identified codebook process, maintaining the set of bits associated with the identified codebook process based on a condition, receiving a second indication to transmit the set of bits associated with the identified codebook process, and transmitting the set of bits based on the second indication.

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