



US010743238B2

(12) **United States Patent**
Chen et al.

(10) **Patent No.:** **US 10,743,238 B2**

(45) **Date of Patent:** **Aug. 11, 2020**

(54) **SYSTEM INFORMATION UPDATES IN BAND WIDTH PART (BWP) SWITCH OPERATION**

(71) Applicant: **FG Innovation Company Limited**,
Tuen Mun (HK)

(72) Inventors: **Hung-Chen Chen**, Hsinchu (TW);
Chie-Ming Chou, Hsinchu (TW)

(73) Assignee: **FG Innovation Company Limited**,
Tuen Mun (HK)

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

(21) Appl. No.: **16/191,465**

(22) Filed: **Nov. 15, 2018**

(65) **Prior Publication Data**
US 2019/0150064 A1 May 16, 2019

Related U.S. Application Data

(60) Provisional application No. 62/586,598, filed on Nov. 15, 2017.

(51) **Int. Cl.**
H04W 4/00 (2018.01)
H04W 48/10 (2009.01)
H04W 48/12 (2009.01)

(52) **U.S. Cl.**
CPC **H04W 48/10** (2013.01); **H04W 48/12** (2013.01)

(58) **Field of Classification Search**
CPC H04W 48/10; H04W 48/12
USPC 370/328, 329, 330
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2019/0053029 A1* 2/2019 Agiwal H04W 76/27
2019/0132109 A1* 5/2019 Zhou H04L 5/0098

* cited by examiner

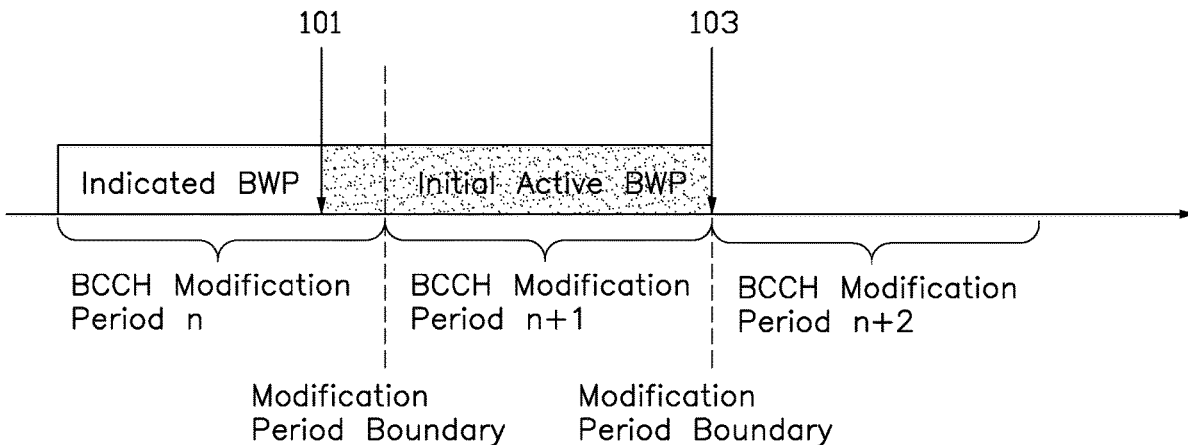
Primary Examiner — Chuong T Ho

(74) *Attorney, Agent, or Firm* — ScienBiziP, P.C.

(57) **ABSTRACT**

A user equipment (UE) for wireless communication is configured to perform bandwidth part (BWP) switching operation in response to receiving a system information change indication. The UE receives the system information change indication via a currently active BWP in a BCCH modification period. The system information change indication notifies the UE that contents of system information have been changed. The UE switches from the currently active BWP to an initial active BWP to receive the changed contents of system information which are required for the UE. The UE receives the changed contents of system information via the initial active BWP in a next BCCH modification period that immediately follows the BCCH modification period. The UE updates the system information according to the changed contents.

20 Claims, 10 Drawing Sheets



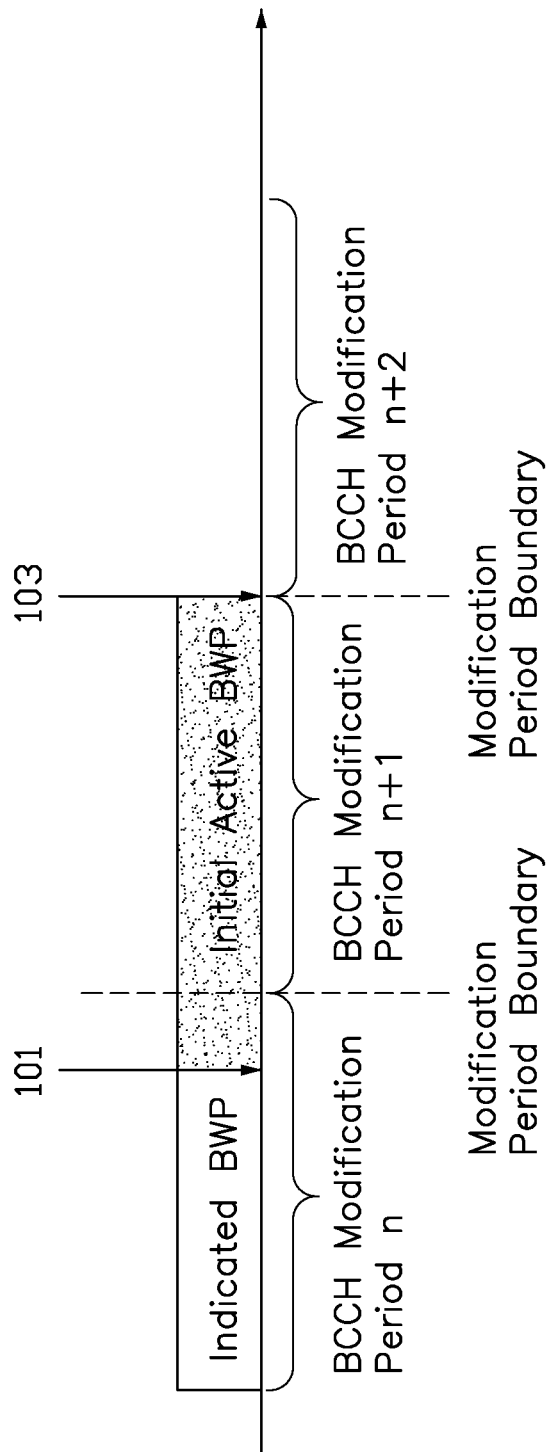


FIG. 1

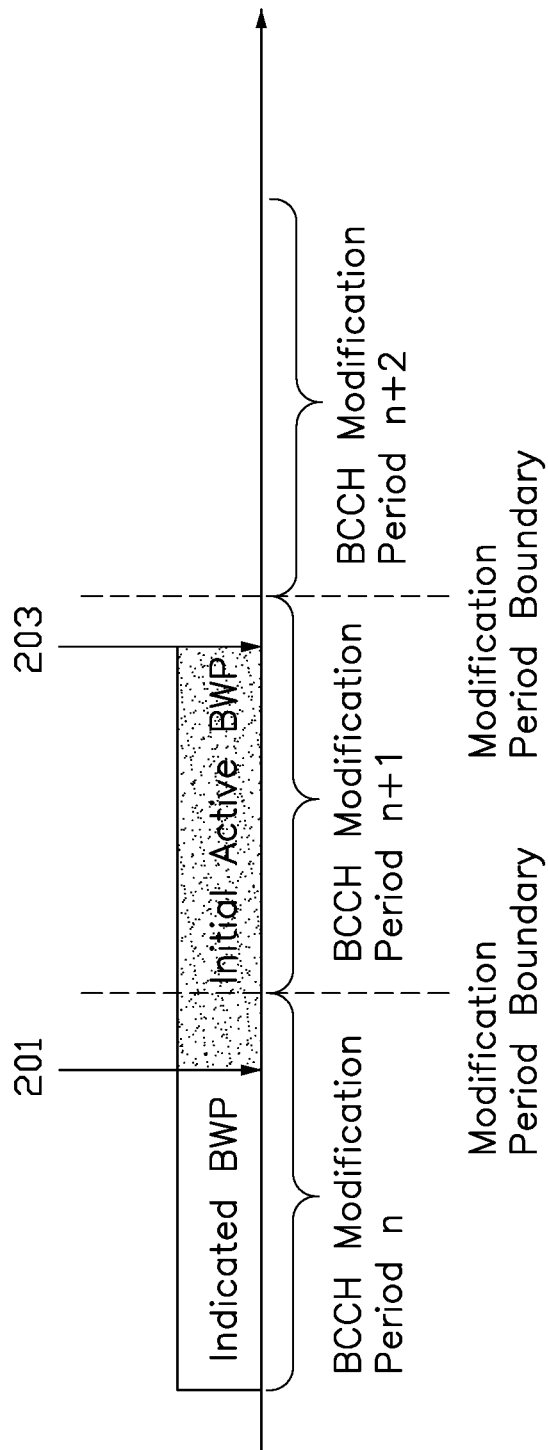


FIG. 2

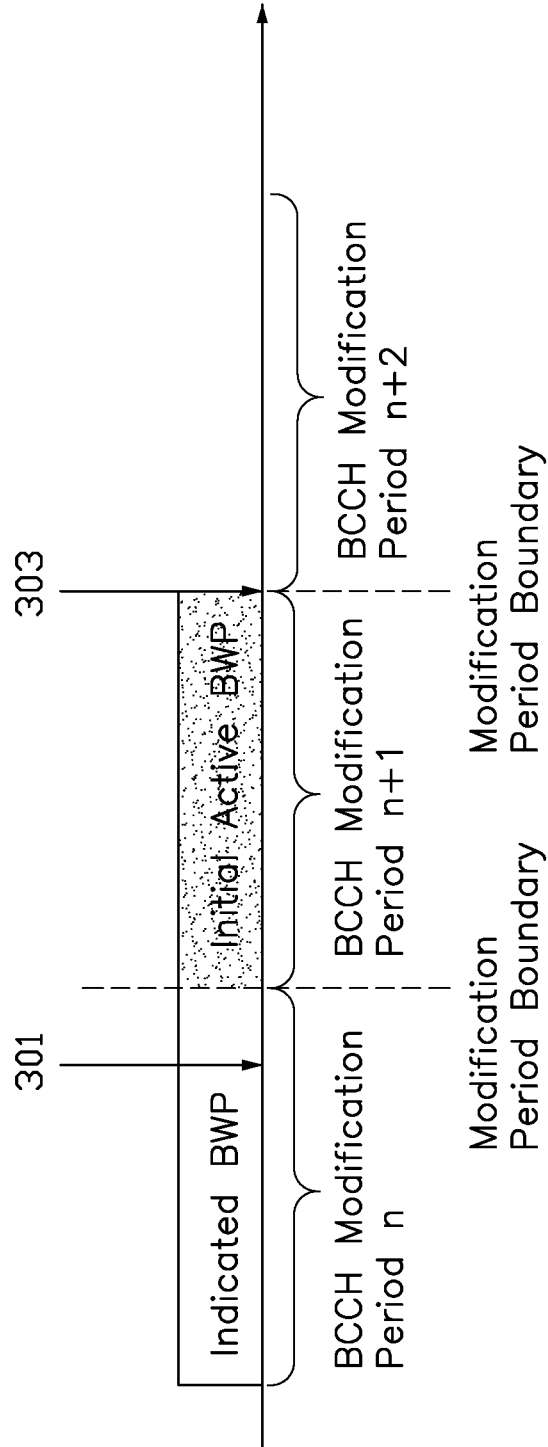


FIG. 3

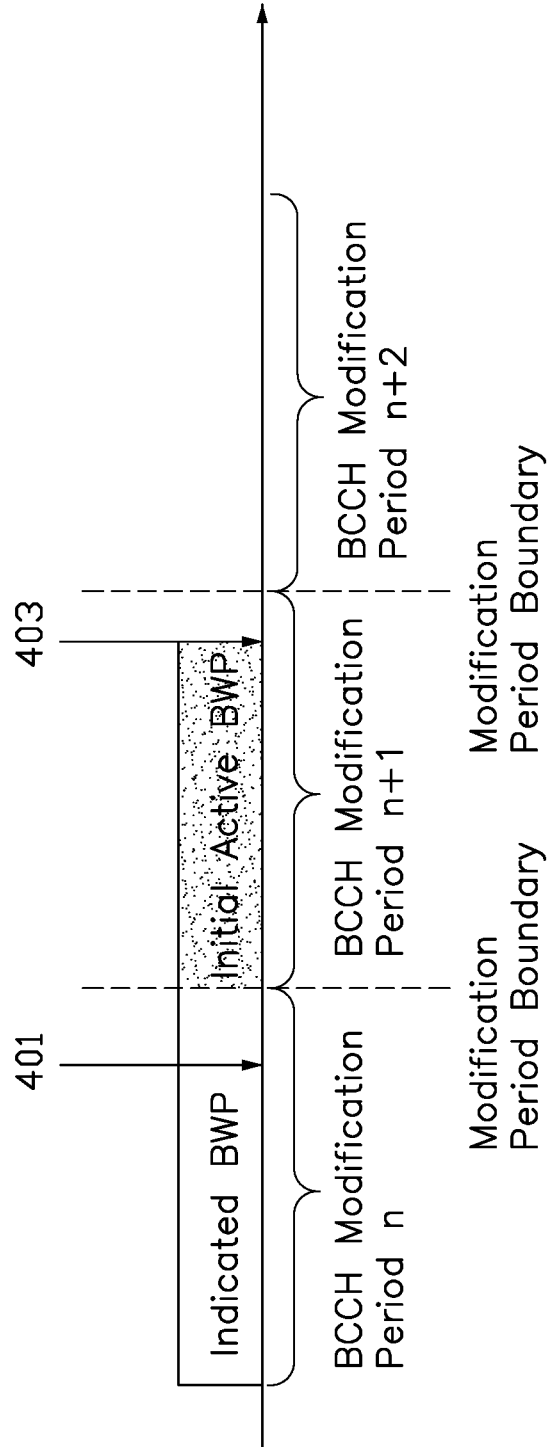


FIG. 4

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.