CLAIMS

1. A communication apparatus comprising:

circuitry, which, in operation:

adjusts a candidate resource ratio based on a time period, and

identifies a plurality of resource candidates based on the adjusted candidate resource ratio; and

a transmitter, which, in operation, transmits a transmission block using a resource selected from the plurality of resource candidates.

2. The communication apparatus of claim 1, wherein the candidate resource ratio refers to a count ratio between a remaining count and an initial count of the plurality of resource candidates.

3. The communication apparatus according to any one of claims 1 and 2, wherein the circuitry is further configured to:

determine if the time period does not exceed a minimum time period indicated by a higher layer signalling.

4. The communication apparatus of claim 3, wherein the candidate resource ratio is a constant value in response to determining the time period exceeds the minimum time period.

5. The communication apparatus of claim 4, wherein the candidate resource ratio is different from the constant value in response to determining the time period does not exceed the minimum time period.

6. The communication apparatus of claim 4, wherein the candidate resource ratio is a value greater than the constant value in response to determining the time period does not exceed the minimum time period.

7. The communication apparatus of claim 6, wherein the value greater than the constant value increases disproportionately with a length of the time period.

8. The communication apparatus according to any one of claims 1 to 7, wherein the circuity is further configured to:

determine if a priority level value exceeds a threshold value, wherein the priority level value exceeding the threshold value corresponds to a low priority level, the low priority level indicating a low priority in scheduling the selected resource for transmitting the transmission block, wherein the candidate resource ratio is adjusted based on the time period in response to the determination of the priority level value.

9. The communication apparatus according to any one of claims 3 to 8, wherein the circuitry is further configured to:

increase a parameter by a fixed value for each iteration of an exclusion process of a preliminary plurality of resource candidates in response to determining the preliminary plurality of resource candidates is less than the candidate resource ratio, the preliminary plurality of resource candidates comprising the plurality of resource candidates, wherein the parameter comprises a RSRP (Reference Signal Received Power) threshold level, the RSRP threshold level being a maximum average power, wherein a resource candidate of the preliminary plurality of resource candidates with an average power higher than the RSRP threshold level will be excluded in the exclusion process.

10. The communication apparatus according to any one of claims 1 to 8, wherein the circuitry is further configured to:

identify the plurality of resource candidates from a preliminary plurality of resource candidates in response to determining the preliminary plurality of resource candidates is not less than the candidate resource ratio, the preliminary plurality of resource candidates comprising the plurality of resource candidates, the plurality of resource candidates being not less than the candidate resource ratio; and

report the plurality of resource candidates to a higher layer.

11. The communication apparatus of claims 10, wherein the circuitry is further configured to:

select a resource from the plurality of resource candidates.

12. The communication apparatus according to any one of claims 1 to 11, wherein the circuitry is further configured to:

determine a minimum count and/or a maximum count of resource candidates, wherein the identification of the plurality of resource candidates is based on the maximum count and/or the minimum count of resource candidates.

~~13. The communication apparatus of claim 9, wherein the circuitry is further configured to:~~

~~increase the parameter by another fixed value in response to the determination of the time period, wherein the another fixed value has a value greater than the fixed value.~~

~~14. The communication apparatus according to any one of claims 1 to 13, wherein the circuity is further configured to:~~

~~adjust the candidate resource ratio depending on at least one of priority level, RSRP threshold, congestion level, cell and geographical area.~~

~~15. The communication apparatus according to any one of claims 3 to 14, wherein the circuitry is further configured to:~~

~~decrease a priority level value for the transmission of the transmission block in response to the determination of the time period, wherein a low priority level value corresponds to a high priority level indicating a high priority in scheduling the selected resource for transmitting the transmission block.~~

~~16. A communication method, comprising:~~

~~adjusting a candidate resource ratio based on a time period;~~

~~identifying a plurality of resource candidates based on the adjusted candidate resource ratio; and~~

~~transmitting a transmission block using a resource selected from the plurality of resource candidates~~Claims

1. A communication apparatus comprising:

circuitry, which, in operation:

determines a candidate resource ratio from a plurality of candidate resource ratios, and

identifies a plurality of candidate resources based on the candidate resource ratio; and

a transmitter, which, in operation, transmits a Physical Sidelink Shared Channel (PSSCH) on at least one resource selected from the plurality of candidate resources.

2. The communication apparatus of claim 1, wherein the plurality of candidate resources is determined from an initial set of candidate resources based on the candidate resource ratio.

9. The communication method of claim 6, wherein the plurality of values includes a ratio related to 20%.

10. The communication method of claim 6, wherein the candidate resource ratio is configured for the communication apparatus.

11. An integrated circuit comprising:

circuitry, which, in operation, controls:

determining a candidate resource ratio from a plurality of candidate resource ratios, and

identifying a plurality of candidate resources based on the candidate resource ratio; and

transmitting a Physical Sidelink Shared Channel (PSSCH) on at least one resource selected from the plurality of candidate resources.