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SAKAMOTO et al.(10) **Pub. No.: US 2024/0214033 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **DOPPLER SHIFT COMPENSATION
APPARATUS AND DOPPLER SHIFT
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(JP)(57) **ABSTRACT**

A signal acquisition unit acquires a reception signal received by a reception device from a transmission device that moves relative to the reception device. A compensation unit compensates for a Doppler shift of the reception signal on the basis of a possibility of a change amount of the Doppler shift. A search unit changes a value of a possibility of the change amount of the Doppler shift in a case where a bandwidth having a power equal to or greater than a predetermined threshold in frequency components of the reception signal after the compensation is larger than a predetermined value.

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