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(19) **United States**(12) **Patent Application Publication**  
LIU(10) **Pub. No.: US 2022/0369442 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **METHOD OF USING STEREO RECORDING  
TO CONTROL THE FLASHING OF  
MULTIPLE LAMPS**(52) **U.S. Cl.**CPC ..... *H05B 47/12* (2020.01); *H05B 47/18*  
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**ABSTRACT**(72) Inventor: **You-Chi LIU**, City of Industry, CA  
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Method of using stereo recording to control the flashing of multiple lamps includes steps of: recording sound sources generated by stereo sound source venue or an electronic device and storing the recorded analog signal in audio signal sampling unit of signal processing device, then amplifying analog signal converting into a digital signal, then separating digital signal into left and right channel signals and enhancing sound signal and then converting sound signal into a light flashing formula to obtain a light flashing parameter value, and then transmitting control commands to a left/right lamp driving unit and a central lamp driving unit respectively according to light flashing parameter value, and then left side lamps, central lamp and right side lamps respectively form staggered flashing according to light flashing parameter value of the operation control unit, so that the flashing light set produces light changes corresponding to the music rhythm and vocals.

Perform a recording operation on a plurality of sound position sources generated by a stereo sound source venue or an electronic device, and store the recorded analog signal in an audio signal sampling unit of a signal processing device.

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Use an audio signal amplifier to amplify the analog signal stored in the audio signal sampling unit and use an analog-to-digital converter to convert the analog signal into a digital signal

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Use an operation control unit to capture the digital signal, and then separate the digital signal into left and right channel signals, then, according to the recorded signal strength of the left channel signal and the right channel signal respectively, and based on the sound source recorded in the central area by the left and right channels, it is enhanced through software calculation, and the sound signal is converted into a light flashing formula to obtain a light flashing parameter value.

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The operation control unit transmits control commands to a left/right lamp driving unit and a central lamp driving unit respectively according to the light flashing parameter value.

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Use the left/right lamp driving unit to drive a left side lamp and a right side lamp of a flashing light set to flash; use the central lamp driving unit to drive a central lamp of the flashing light set to flash, so that the flashing light set generates light changes corresponding to the music rhythm and human voice as the left side lamp, the central lamp and the right side lamp form staggered flashing.

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