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**IMAI et al.**(10) **Pub. No.: US 2023/0230799 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **SAMPLE IMAGE OBSERVATION DEVICE  
AND METHOD FOR SAME**(71) Applicant: **Hitachi High-Tech Corporation,**  
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**ABSTRACT**

Provided is a sample image observation device including an SEM and a control system configured to control the SEM. An observation region of a sample is divided into a plurality of sections, and restoration processing is performed on an image which is acquired by irradiating each section with a sparse electron beam, based on scanning characteristics in the section. A reduction in quality of a restored image due to a beam irradiation position deviation caused by a scanning response is prevented and restoration with high accuracy and high throughput under a condition for preventing sample damage is possible.

