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## (72) Inventors; and

(71) Applicants : RAGAN, Timothy [US/US]; 98 Line Street,  
#2, Somerville, MA 02143 (US). DIMANT, Chiam,  
Moshe [US/US]; 465 Albemarle Road, Newton, MA  
02460 (US).

(74) Agents: HOOVER, Thomas O. et al.; McCarter & Eng-  
lish, LLP, 265 Franklin Street, Boston, MA 02110 (US).

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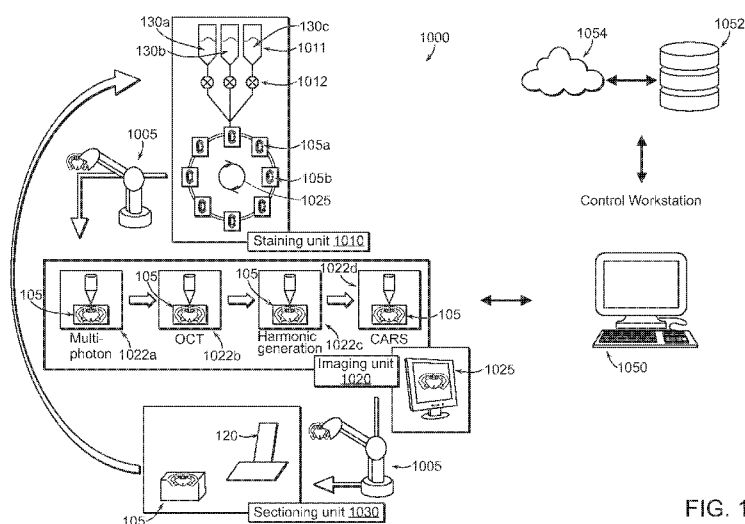


FIG. 10

(57) Abstract: The present invention relates to systems and methods for sequential operation of staining, imaging and sectioning of tissue samples by a processing system. After each layer of the sample is removed by the sectioning system, the system automatically stains the exposed surface of a sample to a depth to enable imaging of the remaining tissue. The system then repeats the sectioning, staining and imaging steps in sequence to image the sample.