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**Aljuri et al.**

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(54) **AUTOMATED IMAGE-GUIDED TISSUE RESECTION AND TREATMENT**

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See application file for complete search history.

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(57) **ABSTRACT**

A system to treat a patient comprises a user interface that  
allows a physician to view an image of tissue to be treated  
in order to develop a treatment plan to resect tissue with a  
predefined removal profile. The image may comprise a  
plurality of images, and the planned treatment is shown on  
the images. The treatment probe may comprise an anchor,  
and the image shown on the screen may have a reference  
image marker shown on the screen corresponding to the  
anchor. The planned tissue removal profile can be displayed  
and scaled to the image of the target tissue of an organ such  
as the prostate, and the physician can adjust the treatment  
profile based on the scaled images to provide a treatment  
profile in three dimensions. The images shown on the  
display may comprise segmented images of the patient with  
treatment plan overlaid on the images.

**12 Claims, 67 Drawing Sheets**

