

Recent patents in biomedical imaging

Patent number	Description	Assignee	Inventor	Date
US 9,948,881	A medical imaging system having a processor with software executing thereon for processing and display of multiple bandwidths of video in multiple display areas. The system receives a video signal with a plurality of portions and generates at least two signals therefrom. Each of the two signals has a bandwidth for display in a different display area. The two signals are updated so that each component displays a different portion of the input video signal, and the two signals may be combined for display on a single display device having two display areas.	Karl Storz Imaging (Goleta, CA, USA)	Amling MR, Schemm H	4/17/2018
US 9,948,852	An imaging system comprising an image-capturing device, a viewer, a control element, and a processor. The control element controls or adjusts an image characteristic of one of the image-capturing devices and the viewer. The processor is programmed to determine a depth value relative to the image-capturing device, determine a desirable adjustment to the control element by using the determined depth value, and control adjustment of the control element to assist manual adjustment of the control element to the desirable adjustment. Useful in a medical robotic system.	Intuitive Surgical Operations (Sunnyvale, CA, USA)	Lilagan PE, Zhao W	4/17/2018
US 9,948,923	A stereoscopic imaging display in which a virtual field-of-view frame or reference window is set in a field of view of a stereo camera. Standard stereoscopic video data are sent. A stereo slide or a stereo photo print is formed with left and right images from the standard stereoscopic video data.	Inaba M (Oyama, Japan)	Inaba M	4/17/2018
US 9,946,820	A method and a computer-readable storage medium for creating a simulation environment for a simulation system of a medical imaging device by a server unit, as well as a server unit and a simulation system for implementing such a method. After reading in an event protocol of the medical imaging device, a determination of a software configuration of the medical imaging device takes place with the use of the event protocol and a determination of a memory image that corresponds to the software configuration of the medical imaging device. The determined memory image can be transferred to the simulation system and the read-in event protocol transferred to the simulation system.	Siemens Aktiengesellschaft (Munich)	Hoff M, Wuebbe M	4/17/2018
US 9,945,922	A medical imaging apparatus including a detector unit, a patient-receiving area at least partially surrounded by the detector unit, and a motion capture unit. The motion-capture unit includes at least one first motion-capture sensor for capturing patient-monitoring data relating to a motion of the patient, and at least one second motion-capture sensor for the capture of further motion data relating to a motion of the first motion-capture sensor.	Siemens Aktiengesellschaft (Munich)	Benner T	4/17/2018
US 9,947,089	A digital specimen manufacturing device comprising: a reduction processing unit that generates a reduced image by reducing a high-resolution image of a first magnification into a second magnification image; an operation instruction unit that instructs the imaging unit to update the second magnification and recapture the low-resolution image when information indicates the difference between the reduced image and the low-resolution image is not within the allowable error range; and an image-processing unit that obtains a third magnification, and outputs an image of the digital specimen by reducing the high-resolution image into an image of the third magnification which an image magnification greater than the updated second magnification and smaller than the first magnification. To be used to diagnose a disease or a medical condition, using a high-resolution image and a low-resolution image.	Panasonic Intellectual Property Management Co. (Osaka, Japan)	Motomura H, Sato Y	4/17/2018
US 9,947,102	Systems, methods, devices, and a non-transitory computer-readable storage medium for segmenting three-dimensional images. In one implementation, a computer-implemented method for segmenting a three-dimensional image is provided. The method may include receiving a three-dimensional image acquired by an imaging device, and selecting a plurality of stacks of adjacent two-dimensional images from the three-dimensional image. The method may further include segmenting, by a processor, each stack of adjacent two-dimensional images using a neural network model. The method may also include determining, by the processor, a label map for the three-dimensional image by aggregating the segmentation results from the plurality of stacks.	Elekta (Atlanta)	Xu J, Han X	4/17/2018
US 9,944,682	The rational structure-based design of monomeric and dimeric forms of a nanobody-enhanced GFP (termed vsfGFP) that demonstrates ~1.3-fold higher brightness than sfGFP in a monomeric form and ~2.5-fold higher brightness in a dimeric form. These new vsfGFP variants demonstrate high stability and brightness in both bacterial and eukaryotic cells and are thus ideal for <i>in vivo</i> imaging applications. The combination of higher brightness, facile folding, stable expression, and tunable dimerization makes them ideal partners in essentially all <i>in vitro</i> applications already described for fluorescent proteins, including antibody fusion-based molecular probes, for which the higher brightness and tunable dimerization provide distinct advantages.	National University of Singapore (Singapore)	Chen S, Eshaghi M	4/17/2018

Source: European Patent Office (<https://www.epo.org>), United States Patent and Trademark Office (<http://www.uspto.gov>).