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(54) Title: A SYSTEM, A SUBSYSTEM AND A METHOD FOR SUPPRESSION OF SPECKLES IN AN IMAGING SYSTEM AND AN IMAGING SYSTEM USING A TRANSMISSION SUBSYSTEM WITH SPECKLE SUPPRESSION ABILITIES

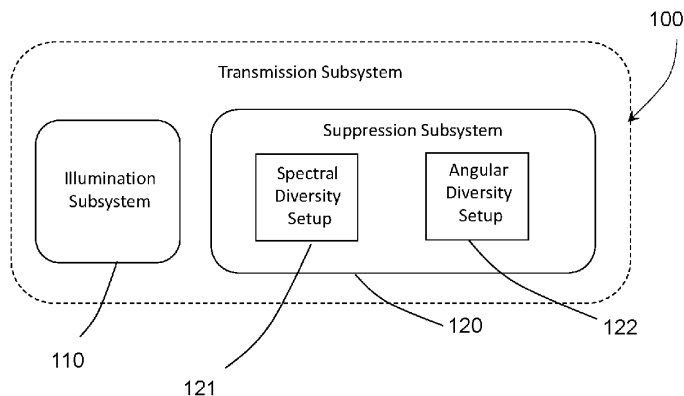


Fig. 1

(57) Abstract: Systems, subsystems and methods for speckle suppression for an imaging system, that use: an illumination setup configured to emit light of a narrow wavelength bandwidth; and a number of wavelength (WL) converters, each configured to receive at least a portion of the light emitted by the illumination setup and convert spectral properties of the received at least portion of the light, to form an array of "n" number of spectrally differentiated input beams; and a spectral beam combining (SBC) setup configured for beam combining of the array of spectrally differentiated input beams emanating from the illumination setup, outputting a combined multispectral beam. The systems, subsystems and/or methods is/are configured to emit output light, for illuminating at least one surface of an area of interest (AOI) in a manner that causes speckle suppression and also mitigates spatial intensity distribution expansion affects caused due to the speckle suppression.

[Continued on next page]

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