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SUMMARY

DUAL (CONFOCAL AND INTERFEROMETRIC)

TECHNOLOGY OPTICAL PROFILOMETER

5 The device comprises a light source (LED), beam
splitters (at least one of which is polarising),
illumination pattern generating means (LCOS micro-display)
and interchangeable microscope lenses that are
conventional lenses that may be used to obtain confocal
images and interferometric lenses that may be used to
10 obtain interferometric images. The micro-display can
generate a sequence of illumination patterns to obtain
confocal images, or total opening of all the illumination
pixels to obtain interferometric images.

15 The design is compact and allows rapid
measurement, with no contact, of the shape and texture of
all types of surfaces on the micrometric and nanometric
scales, including structured or stratified samples
containing dissimilar materials.



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