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## SHORT-TERM PATENT SPECIFICATION 短期專利說明書

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- [54] PORTABLE SPECTROGRAPH AND SPECTRAL DETECTION SYSTEM 便携式光譜儀和光譜檢測系統
- [57] This short-term patent application discloses a portable spectrograph and a spectral detection System. Wherein the portable spectrograph may include a light source for emitting a transmitted light acting on a target sample, a light transmission channel for receiving the reflected light from the target sample, an optical nano-detector for generating a spectral signal of the target sample based on the reflected light input by the light transmission channel, and a mechanical structure for mounting the light source, light transmission channel and the optical nano-detector. The portable spectrograph of this utility employs an optical nano-detector to perform spectral sensing, having better portability, durability, higher potential measurement accuracy, lower input cost and simpler design, and thus easier to be used by ordinary people.

本短期專利公開了一種便攜式光譜儀和光譜檢測系統。其中,便攜式光譜儀可包括:用於發射作用於被檢測對象的發射光線的發光光源,用於接收來自被檢測對象的反射光線的輸光通道,用於根據所述輸光通道輸入的反射光線生成被檢測對象的光譜信號的納米光學檢測器,以及,用於安裝發光光源、輸光通道和納米光學檢測器的機械結構。本實用新型的便攜式光譜儀採用納米光學檢測器進行光譜感測,具有較好的便攜性,耐用性,更高的潛在測量精度,更低的投入成本和簡單的設計,易於被普通人應用。

