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17/24, G01N 21/65, B24B 49/12, B28D 5/00Strauss Strasse 32, 85591 Vaterstetten (DE). **WALLIS, David**; Bautzner Strasse 115, 01099 Dresden (DE).

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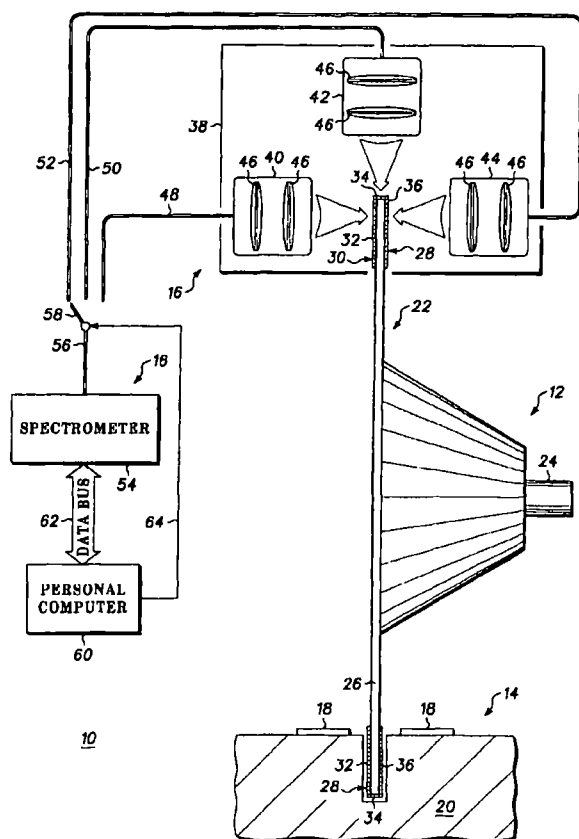
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(54) Title: APPARATUS AND METHOD FOR MEASURING TOOL DEGRADATION



(57) Abstract: A machining apparatus (10) comprises a material removing tool (12) movably mounted for removing material from a workpiece (14); means for illuminating (42, 54) a sample area upon a tool surface (34) with excitation radiation; means for receiving (42, 54) sample light emitted from the sample area; a spectral analyzer (54) for performing a spectral analysis of the sample light received; and means for determining (60) the condition of the tool at the sample area from the spectral analysis of the sample light. The wear of the tool (12) is determined as such a condition. Operation parameters of the machining apparatus (10) are adjusted according to the determined wear. An example application is a wafer dicing tool.

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\*ACTION\*

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