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(57) Abstract:

The present invention relates to a device (300) to treat harmful gases introduced into the environment by vehicles. The device comprises a filtration module (204), an impedance unit (208), and a processing unit (310). A tin oxide (SnO2) based filtration module (204) is configured to absorb harmful gases emitted from the engine (304) of the vehicle and release filtered air. The filtration module (204) is installed in the catalytic converter (106). An impedance unit (208) is attached to the filtration module (204) to determine the impedance of the filtration module (204).

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