

Title (en)

Microwave oven having a door-closing safety device.

Title (de)

Mikrowellenofen mit einer Türsicherheitsverschlussvorrichtung.

Title (fr)

Four à micro-ondes comportant un dispositif de sécurité de fermeture de porte.

Publication

EP 0247668 A1 19871202 (FR)

Application

EP 87200890 A 19870514

Priority

FR 8607391 A 19860523

Abstract (en)

[origin: US4760229A] A microwave oven with a door-closing safety device is provided wherein a movable door comprises a device wherein the beam of at least one light emitter is guided by means of light guides towards a light beam detector. The light guides are arranged along a substantial portion of at least one side of the oven door frame. The beam of light in its non-guided path between the emitter and the detector passes through diaphragms, integral with the oven door, each diaphragm having an aperture such that the light beam passes through it when the door is properly closed but wherein the light beam is intercepted by the edge of the diaphragm when the door is not properly closed. The detector activates a signal that actuates the magnetron when the light beam is received; however, when the beam is intercepted, activation of the magnetron is prevented thereby preventing leakage of microwave energy.

Abstract (fr)

Four à micro-ondes muni d'un dispositif de sécurité afin d'éviter les fuites d'énergie micro-ondes. Ce dispositif est constitué de guides de lumière (16, à 16₄), placés sur l'encadrement du four, dans lesquels passe un faisceau lumineux. Des diaphragmes (13, 14, 15) solidaires de la porte mobile peuvent intercepter le faisceau lorsque la porte est mal fermée, ou laisser passer le faisceau lumineux lorsque la porte est correctement fermée. Le fonctionnement du magnétron est contrôlé par le signal détecté par un récepteur de lumière.

IPC 1-7

H05B 6/66; **H05B 6/76**

IPC 8 full level

H05B 6/68 (2006.01); **F24C 7/02** (2006.01); **H05B 6/66** (2006.01); **H05B 6/76** (2006.01)

CPC (source: EP US)

H05B 6/6417 (2013.01 - EP US)

Citation (search report)

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