

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 May 2023 (25.05.2023)



(10) International Publication Number
WO 2023/087057 A1

(51) International Patent Classification:

B82Y 15/00 (2011.01) *G01K 11/00* (2006.01)
G01K 1/16 (2006.01) *A61J 1/18* (2023.01)

(21) International Application Number:

PCT/AU2022/051370

(22) International Filing Date:

16 November 2022 (16.11.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2021903708 17 November 2021 (17.11.2021) AU

(71) Applicant: **CARETECH SERVICES PTY LTD**
[AT/AU]; 44 Kings Park Road, Perth, Western Australia
6000 (AU).

(72) Inventor: **WEARNE, David John**; 16 Hatfield Way,
BOORAGOON, Western Australia 6154 (AU).

(74) Agent: **WRAYS PTY LTD**; Level 7, 863 Hay Street, Perth,
Western Australia 6000 (AU).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE,
KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,
LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG,
NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS,
RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,

(54) Title: A TEMPERATURE DETECTOR FOR A HEAT SENSITIVE MATERIAL

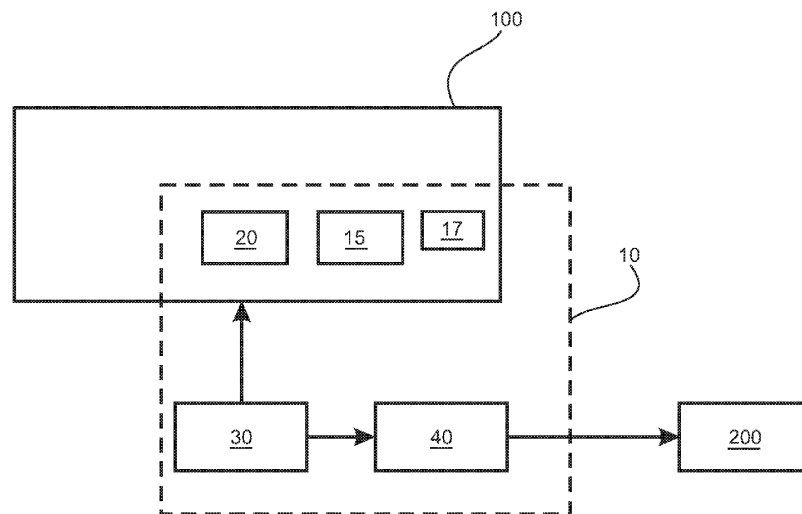


Fig. 1

(57) Abstract: A temperature detector (10) for a heat sensitive product (15) comprises: (a) a carbon or silicon containing material (20) having a heat transfer property variable with temperature, the carbon or silicon containing material being located proximate to a heat sensitive material (15); (b) a sensor (30) for measuring the heat transfer property of the carbon or silicon containing material (20); and (c) a signal generator (40) that provides a signal reflective of the heat transfer property of the carbon or silicon containing material (20) as measured by the sensor (30) and a temperature indication for the heat sensitive product (15).

[Continued on next page]

LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI,
SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report (Art. 21(3))*
- *in black and white; the international application as filed
contained color or greyscale and is available for download
from PATENTSCOPE*