$GG'' FG \sin(26{\cdot}6°) = 50 \times 0{\cdot}448 = 22{\cdot}4$ mm

$FG'' = FG \cos(26{\cdot}6°) = 50 \times 0{\cdot}894 = 44{\cdot}7$ mm

Therefore

$GG''' = GG'' + G''G''' = 22{\cdot}4 + 30 = 52{\cdot}4$ mm

$G'''K = FK' - FG'' = 180 - 44{\cdot}7 = 135{\cdot}3$ mm

Therefore

$$(GK)^2 = (GG''')^2 + (G'''K)^2$$
$$= (52{\cdot}4)^2 + (135{\cdot}3)^2 = 21040$$

Therefore

$GK = 145$ mm

To find KI

$I''I' = JH - H''J = 412{\cdot}3 - 400 = 12{\cdot}3$ mm

$I'H' = HI \sin(7°) = 250 \times 0{\cdot}112 = 30{\cdot}5$ mm

$II' = HI \cos(7°) = 250 \times 0{\cdot}9925 = 248$ mm

$FH = 500$ mm

$AH'' = 493{\cdot}4$ mm

$AI'' = AH'' - I'H = 493{\cdot}4 - 30{\cdot}5 = 462{\cdot}9$ mm

$I''I = I''I' + I'I = 12{\cdot}3 + 248 = 260{\cdot}3$ mm

Therefore

$$(AI)^2 = (AI'')^2 + (I''I)^2$$
$$= (462{\cdot}9)^2 + (260{\cdot}3)^2$$
$$= 275500$$

Therefore

$AI = 525{\cdot}0$ mm

From triangle AGI

$$\cos(\angle AGI) = \frac{(AG)^2 + (GI)^2 - (AI)^2}{2 \times AG \times GI}$$
$$= \frac{(140)^2 + (510)^2 - (525)^2}{2 \times 140 \times 510}$$
$$= 0{\cdot}033$$

Therefore

$\angle AGI = 88{\cdot}1°$

$$\angle AGG'' = \tan^{-1}\left(\frac{AF + FG''}{GG''}\right)$$
$$= \tan^{-1}\left(\frac{93{\cdot}4 + 44{\cdot}7}{22{\cdot}4}\right) = 81{\cdot}2°$$

Therefore

$$\angle G'''GI = \angle AGI - \angle AGG''$$
$$= 88{\cdot}1° - 81{\cdot}2° = 6{\cdot}9°$$

$$\angle KGG''' = \tan^{-1}\left(\frac{G'''K}{G'''G}\right)$$
$$= \tan^{-1}\left(\frac{135{\cdot}3}{52{\cdot}4}\right) = 68{\cdot}8°$$

Therefore

$$\angle IGK = \angle G'''GK - \angle G'''GI = 68{\cdot}8° - 6{\cdot}9°$$
$$= 61{\cdot}9°$$

From triangle KGI

$$(KI)^2 = (GK)^2 + (GI)^2 - 2GK.GI \cos(\angle IGK)$$
$$= (145)^2 + (510)^2 - 2 \times 145 \times 510 \times \cos(61{\cdot}9°)$$
$$= 210300$$

Therefore

$KI = 459$ mm

Erratum

Pasteless electrode for clinical use

C. J. De Luca, R. S. Le Fever and F. B. Stulen (*Med. & Biol. Eng. & Comput.*, 1979, **17**, 387–390). The sentences at the bottom of the left-hand column and the top of the right-hand column on p. 389 should read:

The two *n–p–n* transistors located next to this amplifier act as constant current sinks for the j.f.e.t. sources and set the bias current through the j.f.e.t.s (typically 100 μA).

With this arrangement, instrumentation amplifiers with relatively large d.c. input bias currents (<100 μA) may be used, such as an Analog Devices 521. The instrumentation amplifier provides all of the common mode rejection, amplification and bandwidth limitation of the electrode unit.