

(19)



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(11) Publication number:

0 470 558 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **91113143.1**(51) Int. Cl.⁵: **G08C 19/46**(22) Date of filing: **05.08.91**(30) Priority: **06.08.90 US 583480**(43) Date of publication of application:
12.02.92 Bulletin 92/07(84) Designated Contracting States:
DE FR GB IT(88) Date of deferred publication of the search report:
27.05.92 Bulletin 92/22(71) Applicant: **CINCINNATI MILACRON INC.**
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(57) Interface circuits for electromagnetic position transducers are provided to reduce the effects of capacitive coupling occurring in the conductive cabling between the position transducers and the associated interfaces located remotely therefrom. Capacitive coupling of excitation signals to the transducer output signals result in error signals appearing as cyclic error in measured positions. The magnitude of the coupled signals are substantially reduced by

providing excitation signals symmetrical with respect to ground. The magnitude of the coupled signals are also reduced by presenting equal impedances relative to ground to the output signal return and signal paths. By reducing the effects of capacitively coupled signals, conducting cables for the excitation signals and the transducer output signals may be incorporated in a single shielded cable.

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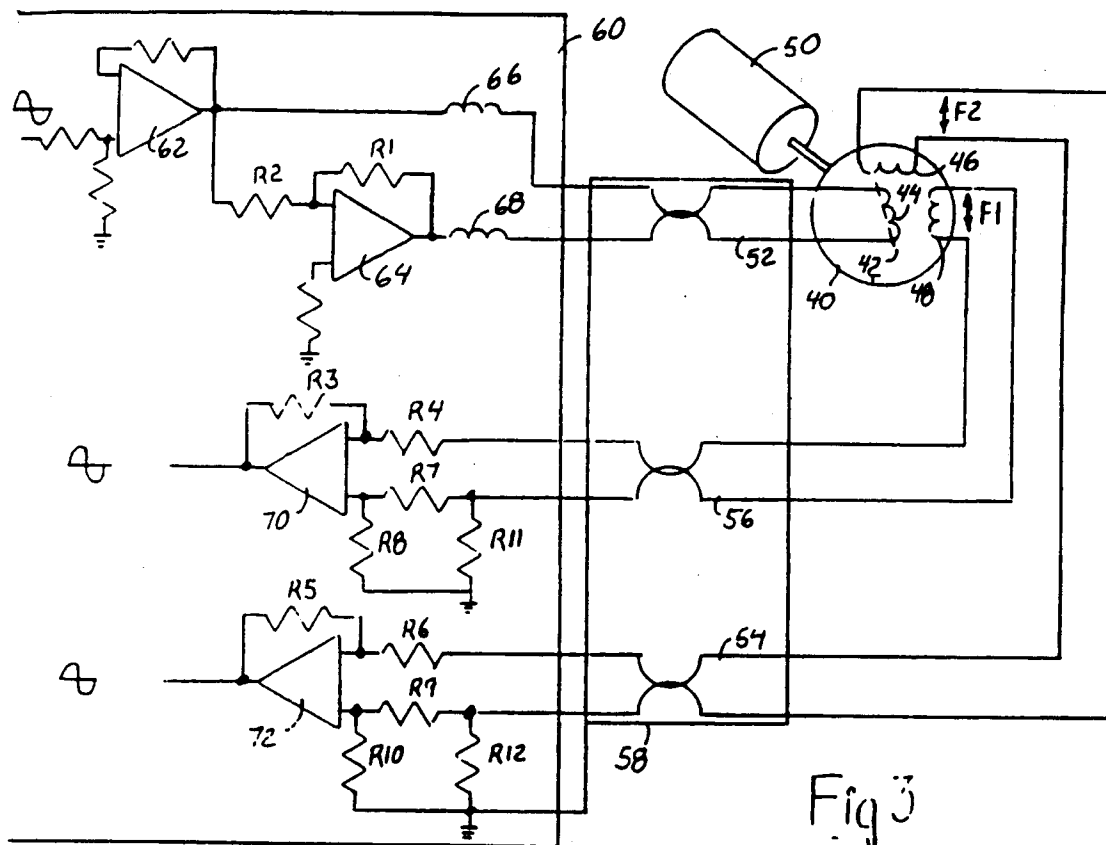


Fig 3



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EUROPEAN SEARCH REPORT

Application Number

EP 91 11 3143

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-4 270 077 (SWARTZ ET AL) * column 3, line 24 - line 47 * * column 6, line 4 - line 30; figures 1-3 *	1,2,4,6,7	G08C19/46
X		3,10	
Y		8	

A	US-A-4 207 505 (FALCK ET AL) * column 3, line 36 - line 42 * * column 4, line 26 - line 40; figures 1,2 *	1,2,4-7,9	
Y		8	

A	US-A-4 270 061 (GRONNER ET AL) * column 2, line 41 - column 4, line 66; figures 1-4 *	1,2,4-6	

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G08C
Place of search THE HAGUE		Date of completion of the search 23 MARCH 1992	Examiner WANZEELE R.J.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			