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(71) Applicant (for all designated States except US): **AFFIVAL, INC.** [US/US]; 6400 Sheridan Drive, Suite 138, Williamsville, NY 14221 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SCHWADRON, James, Timothy** [US/US]; Valencia, Pennsylvania (US).
NIEMI, Leslie, Wade [US/US]; Davenport, Iowa (US).

MARZEC, Gregory [US/US]; East Amherst, New York (US).

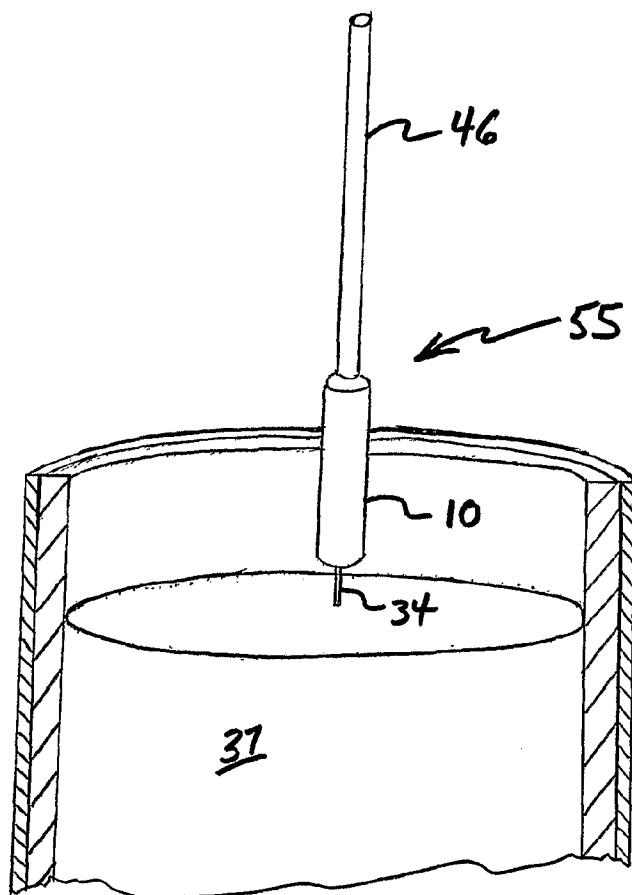
(74) Agents: **ROBERTS, R.** et al.; HODGSON RUSS LLP, The Guaranty Building, 140 Pearl Street, Suite 100, Buffalo, New York 14202-4040 (US).

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[Continued on next page]

(54) Title: GUIDE TUBE END-PIECE, ASSEMBLY AND METHOD



(57) Abstract: An end-piece for an additive guide tube is disclosed. Such an end piece may have a durable sleeve and a sloughable sleeve. The sloughable sleeve may have a channel through which an additive may be delivered, and the sloughable sleeve may reside in the through-hole of the durable sleeve and may be secured to the durable sleeve. When molten metal contacts the sloughable sleeve, the sloughable sleeve burns or melts and sloughs off, thereby preventing the molten metal and slag from sticking to the end-piece, which in turn prevents buildup of metal and slag.



FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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PCT/US 06/07718

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8): C22C 33/12 (2007.01)

USPC: 420/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

USPC: 420/19

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC: 222/105, 173, 183; 420/19; 428/34.4, 34.5, 34.7; 294/82.1 (see search terms below)

IPC(8): B66C 1/34; B28B 11/00; B65D 35/56 (2007.01)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Electronic Databases Searched: USPTO WEST(PGPUB, EPAB, JPAB, USPT); Google, Thomson dialog. Search Terms Used: additive adj guid, tube adj end-piece, tube adj guide, additive or tube or guide or piece or end, sleeve or channel? or slough\$, durable or ceramic-mortar or ceramic or mortar, staple or woven or paperboard, metal.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,617,171 A (Feutrel) 14 October 1986 (14.10.1986) figure 1; col 3, ln 57 to col 4, ln 59; col 1, ln 53-65; col 1, ln 57-63; col 1, ln 57-63.	1-32
Y	US 3,367,646 A (Robertson et al.) 06 February 1968 (06.02.1968) col 1, ln 23-31.	1-32
A	US 5,948,350 A (Falk) 07 September 1999 (07.09.1999) col 2, ln 19-56; col 3, ln 34-68; col 4, ln 34-65	1-32



Further documents are listed in the continuation of Box C.



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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
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Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300

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