

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 October 2006 (19.10.2006)

PCT

(10) International Publication Number
WO 2006/108463 A1

(51) International Patent Classification:
H03M 7/42 (2006.01)

(21) International Application Number:
PCT/EP2006/001294

(22) International Filing Date:
13 February 2006 (13.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/670,993 13 April 2005 (13.04.2005) US
11/251,485 14 October 2005 (14.10.2005) US

(71) Applicant (for all designated States except US): **FRAUN-
HOFER-GESELLSCHAFT ZUR FÖRDERUNG
DER ANGEWANDTEN FORSCHUNG E.V.** [DE/DE];
Hansastraße 27c, 80686 Munich (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SPERSCHNEI-
DER, Ralph** [DE/DE]; Debert 75, 91320 Ebermannstadt

(DE). **HERRE, Jürgen** [DE/DE]; Hallerstraße 24, 91054
Buckenhof (DE). **LINZMEIER, Karsten** [DE/DE];
Elise-spaeth-strasse 4, 91058 Erlangen (DE). **HILPERT,
Johannes** [DE/DE]; Herrnhüttestrasse 46, 90411 Nürn-
berg (DE).

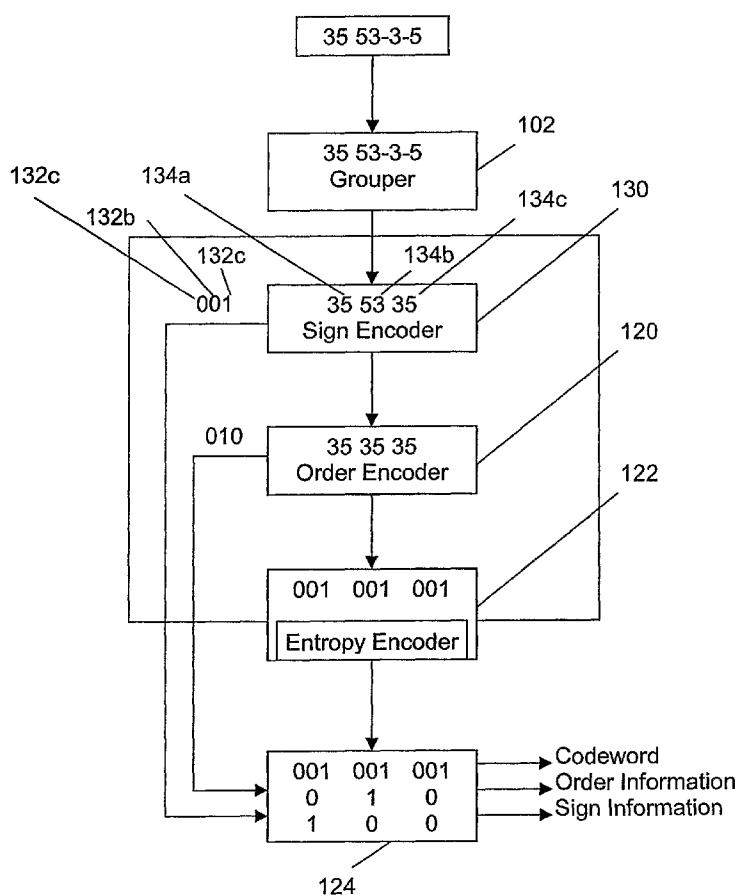
(74) Agents: **ZINKLER, Franz** et al.; Schoppe, Zimmer-
mann, Stöckeler & Zinkler, Postfach 246, 82043 Pullach
bei München (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: ENTROPY CODING WITH COMPACT CODEBOOKS



(57) Abstract: The present invention is based on the finding that an efficient code for encoding information values can be derived, when two or more information values are grouped in a tuple in a tuple order and when an encoding rule is used, that assigns the same code word to tuples having identical information values in different orders and that does derive an order information, indicating the tuple order, and when the code word is output in association with the order information.

WO 2006/108463 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, 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).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.