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ERRATA

Addendum to Gillespy T III, Rowberg AH: Displaying radiologic images on personal computers: Image storage and compression—Part 2 J Digit Imaging 7:1-12, 1994

The corrected version of Table 9 follows.

Table 9. LZW Compression of the Sample Phrase "THAT THAT IS, THAT THAT IS NOT, IS NOT."

Input	Output	Input Bits*	Output Bits†	Dictionary			
				Code	Parent	Character	String‡
'T'		8					
'H'		8	9	257	'T'	'H'	'TH'
'A'	'H'	8	9	258	'H'	'A'	'HA'
'T'	'A'	8	9	259	'A'	'T'	'AT'
' '	'T'	8	9	260	'T'	' '	'T '
'TH'	' '	16	9	261	' '	'T'	'T '
'AT'	257	16	9	262	257	'A'	'THA'
' '	259	8	9	263	259	' '	'AT '
'I'	' '	8	9	264	' '	'I'	'I '
'S'	'I'	8	9	265	'I'	'A'	'IS'
' '	'S'	8	9	266	'S'	' '	'S, '
'I'	' '	16	9	267	' '	' '	' '
'S, '	264	16	9	268	264	'S'	'IS'
'T'	266	16	9	269	266	' '	'S, '
'HA'	261	16	9	270	261	'H'	'TH'
'T'	258	16	9	271	258	'T'	'HAT'
'THA'	260	24	9	272	260	'T'	'T T'
'T '	262	16	9	273	262	'T'	'THAT'
'IS'	260	16	9	274	260	'I'	'T I'
' '	265	8	9	275	265	' '	'IS '
'N'	' '	8	9	276	' '	'N'	'N '
'O'	'N'	8	9	277	'N'	'O'	'NO'
'T'	'O'	8	9	278	'O'	'T'	'OT'
' '	'T'	16	9	279	'T'	' '	'T, '
'IS '	267	24	9	280	267	'I'	'I, I'
'NO'	275	16	9	281	275	'N'	'IS N'
'T'	277	8	9	282	277	'T'	'NOT'
' '	'T'	8	9	283	'T'	' '	'T, '
< EOF >	' '		9				
	< EOF >		9				
Total		344	261				

The dictionary entries 0 to 255 are preloaded with all possible input characters. Entry 256 is the end-of-file (EOF) marker. As characters are input into the program, new entries are added to the dictionary. The coder outputs tokens, which either represent an original or new dictionary entry. In one implementation,⁷ the dictionary is a data structure with three entries: the dictionary code, the parent code, and the recently added character. The parent code can either be an original or new dictionary entry.

*Number of bits to store the uncompressed character.

†Number of bits output by the coder. A 9-bit token is used for illustration purposes.

‡The effective string represented by the dictionary code. This string is not actually stored in the dictionary per se.