

Samuel Morse, American Electro-Magnet Telegraph Patent and Morse Code

Samuel Finley Breese Morse, an accomplished painter and inventor, was convinced of the possibility of transmitting words using electricity and wires. In 1840 he patented "Improvement in the Mode of Communicating Information by Signals By the Application of Electro-Magnetism" and named it the "American Electro-Magnetic Telegraph."

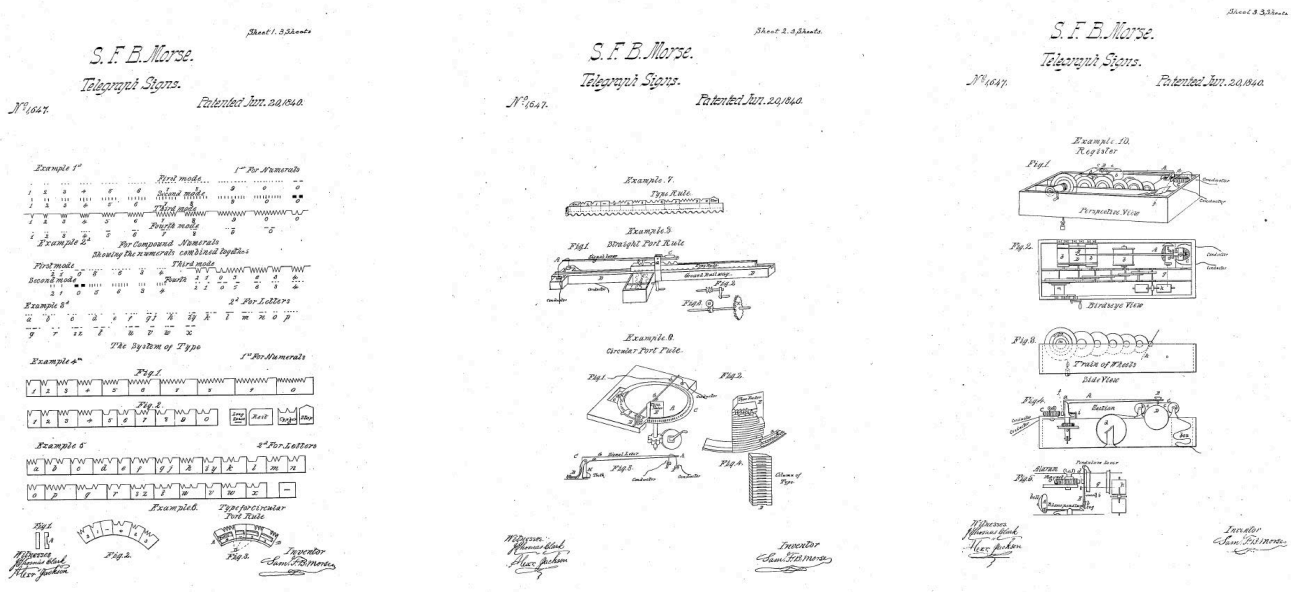
Information Theory Unit

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"To all whom, it may concern:

Be it known that I, the undersigned, SAMUEL F. B. MORSE, of the city, county, and State of New York, have invented a new and useful machine and system of signs for transmitting intelligence between distant points by the means of a new application and effect of electro-magnetism in producing sounds and signs, or either, and also for recording permanently by the same means, and application, and effect of electro-magnetism, any signs thus produced and representing intelligence, transmitted as before named between distant points; and I denominate said invention the "American Electro-Magnetic Telegraph,...."



Morse Code

International Morse Code	
<ol style="list-style-type: none"> The length of a dot is one unit. A dash is three units. The space between parts of the same letter is one unit. The space between letters is three units. The space between words is seven units. 	
A	.-
B	...-
C	-.-.-
D	.-.-
E	..
F	..-.
G	-.--
H
I	..--
J	.-.-.-
K	-.-.
L	.-.-.
M	--
N	-.-
O	---
P	.-.-.
Q	-.-.
R	.-.-
S	...-
T	-.
U	..-.
V	...-
W	.-.-
X	-.--
Y	-.--
Z	--..
1	.-.-.-
2	..-.-
3	...--
4-
5
6	-.....
7	--....
8	---...
9	----.
0	-----

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https://ethw.org/Morse_Code

"Morse code is a communications language created by Samuel Morse and Alfred Vail originally to be used with the telegraph. Each letter of the alphabet is made up of combinations of dots and dashes that were originally sent over telegraph wires or by radio waves from one place to another. Morse is the earliest type of digital communications, as the code is made solely from Ones and Zeros (ons and offs). It was the only way to rapidly communicate over very long distances before voice communications and two-way radios were able to do the job better. Morse Code communications can tolerate noise in the communication channel that would otherwise prevent voice (SSB, AM or FM) communications."

"Perhaps the most famous "word" in Morse Code is SOS. Contrary to popular belief, SOS does not mean "save our ship," although it often did just that. Rather, it was chosen as the international Morse code distress signal, because the three dots for S and the three dashes for O (... --- ...) make a clear and distinct signal."

An example of the SOS sound:

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