NCIC FPC Filing Sequence Formula

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ABSTRACT

The NCIC FPC Filing Sequence Formula can be used in a physiological study on the combination of fingerprint patterns and their frequency for each digit. It was designed as applicable to genetics or any other discipline that encompasses the phenomenon of human physical structure. Theoretically, fingerprint classifications are listed chronologically according to their appearance upon the person of individuals; an advanced computational formula for educational institutions and the criminal justice system. Conclusions can be drawn from any research project that is developed with the implementation of the calculation methods provided in this article.

Keywords: NCIC FPC filing sequence; physiological study; chronological order.

1. INTRODUCTION

The NCIC FPC contains 20 characters, each pair of characters represents one digit beginning with the right thumb as the No. 1 digit and ending with the left little finger as the No. 10 digit; the left thumb is then No. 6. For every consecutive pair of characters, one code can be assigned out of a possible 114 codes (from PI to XX). This means that there are actually only 10 individual segments for the NCIC FPC code, with each one maintaining a pair of the 20 characters to represent an individual code [1,2] (Fig. 1). The use of fingerprints for identification purposes is based upon distinctive ridge outlines which appear on the bulbs on the inside of the end joints of the fingers and thumbs. These ridges have definite contours and appear in several general pattern types, each with general and specific variations of the pattern, dependent on the shape and relationship of the ridges [3-5].

The following is a formula for filing the NCIC FPC into a sequential order which may be used in a physiological study of the combination of fingerprint patterns and their frequency for each digit. The NCIC FPC is arranged into a chronological order according to its appearance upon the person of individuals. As a result, there is genetic and evolutionary value in the NCIC FPC Filing Sequence Formula

Let (X) equal the number of assigned to the NCIC FPC code (Table 1). Each of the ten segments, with the exception of segment #1, must be assigned a decimal number which shall be added to the assigned number for the given NCIC FPC Code.

This adding of the decimal number to the assigned number for the NCIC FPC code must be done to establish a unique numerical value to each segment of the ten-segment unit. Segment number 1, however, need not be assigned a decimal value because the other nine segments maintain an identity distinguished from it. (The reason for choosing #1 segment as the one which shall not be assigned a decimal value is because #1 segment is the only segment which can provide us with the lowest possible number in the calculation if no decimal was to be added to it.) It can be noted that in this way no two or more segments can provide the same exact number. Furthermore, no two NCIC FPC codes can provide the same filing number, even if the original code appeared in a reverse sequence (Table 2).

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Table 1. Let X e	qual the number	of assigned to	the NCIC FPC code
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Digit	1	2	3	4	5	6	7	8	9	10
Number										
Assigned (X)	Х	X.00001	X.00002	X.00003	X.00004	X.00005	X.00006	X.00007	X.00008	X.00009

Table 2. Adding of the decimal number to the assigned number for the NCIC FPC code must be done to establish a unique numerical value to each segment of the ten-segment unit.

NCIC FPC code	14	ХХ	AA	СО	04	SR	60	TT	DM	10
Number Assigned										
to the Given Code	2.6	11.4	11.2	0.6	1.6	11.3	7.1	11.1	0.8	2.2
Decimal added to										
the Assigned	2.6	11.40001	11.20002	0.60003	1.60004	11.30005	7.10006	11.10007	0.80008	2.20009
Number										

After the decimal number is added to the assigned number for the NCIC FPC code, multiplication takes place. That is, #1 segment times #2 segment and that product multiplied by #3 segment, and so on until #10 segment has been included in the multiplication. The end product shall provide the filing location for the given NCIC FPC code.

PI	=	0.1	17	=	2.9	45	=	5.7	74	=	8.5	SR	-	11.3
PM	=	0.2	18	=	3	46	=	5.8	75	=	8.6	XX	=	11.4
PO	=	0.3	19	=	3.1	47	=	5.9	76	=	8.7			
CI	=	0.4	20	=	3.2	48	=	6	77	=	8.8			
СМ	=	0.5	21	=	3.3	49	=	6.1	78	=	8.9			
со	=	0.6	22	=	3.4	51	=	6.2	79	=	9			
DI	=	0.7	23	=	3.5	52	=	6.3	80	=	9.1			
DM	=	0.8	24	=	3.6	53	=	6.4	81	=	9.2			
DO	=	0.9	25	=	3.7	54	=	6.5	82	=	9.3			
XI	=	1	26	=	3.8	55	=	6.6	83	=	9.4			
XM	=	1.1	27	=	3.9	56	=	6.7	84	=	9.5			
хо	=	1.2	28	=	4	57	=	6.8	85	=	9.6			
1	=	1.3	29	=	4.1	58	=	6.9	86	=	9.7			
2	=	1.4	30	=	4.2	59	=	7	87	=	9.8			
3	=	1.5	31	=	4.3	60	=	7.1	88	=	9.9			
4	=	1.6	32	=	4.4	61	=	7.2	89	=	10			
5	-	1.7	33	-	4.5	62	=	7.3	90	-	10.1			
6	=	1.8	34	=	4.6	63	=	7.4	91	=	10.2			
7	=	1.9	35	=	4.7	64	=	7.5	92	=	10.3			
8	=	2	36	=	4.8	65	=	7.6	93	=	10.4			
9	=	2.1	37	=	4.9	66	=	7.7	94	=	10.5			
10	=	2.2	38	=	5	67	=	7.8	95	=	10.6			
11	=	2.3	39	=	5.1	68	=	7.9	96	=	10.7			
12	=	2.4	40	=	5.2	69	=	8	97	=	10.8			
13	=	2.5	41	=	5.3	70	=	8.1	98	=	10.9			
14	=	2.6	42	=	5.4	71	=	8.2	99	=	11			
15	=	2.7	43	=	5.5	72	=	8.3	TT	=	11.1			
16	=	2.8	44	=	5.6	73	=	8.4	AA	=	11.2			

Fig. 1. Each code for the NCIC FPC is assigned a number of the 114 possible.

When there are ten segments and 114 possible codes for each segment the total number of combinations is 3.707221314118566e+20.

2. EXAMPLE

(2.6) X (11.40001) X (11.20002) X (0.60003) X (1.60004) X (11.30005)

X (7.10006) X (11.10007) X (0.80008) X (2.20009) = 499623.8317. In conclusion, the NCIC FPC code, 14XXAACO04SR60TTDM10 would be filed as 499623.8317 between 1.00451E-10 and 37,073,676,543.

Click here for statistical data on female NCIC FPC frequencies. Click here for statistical data on male NCIC FPC frequencies. Click here to determine the NCIC FPC filing number.

Click here to calculate the percent frequency of a pattern using the NCIC FPC.



Fig. 2. Evolution of fingerprint patterns in chronological order Finger Prints Palms and Soles by Harold Cummins and Charles Midlo (1943) showing fingerprint patterns in chronological order (page # 62)

3. CONCLUSION

The NCIC FPC can be looked-on as a universal language, all law enforcement agencies and other entities understand it. The filing sequence formula was created because computers should also be networked in the implementation of this strategical function, with its useful possibilities in an all scientific community. In short, it was created so that we can globally share the interpretations of the same fingerprint pattern discoveries.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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Biography of author(s)



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His experience in the performance of finger print identification encompasses research and study of the dermatoglyphic configurations. He provided instruction on the identification of fingerprints for the City of New York Department of Correction Training Academy; which included lectures in that discipline. During 1988, he assisted in the composition of a lesson plan on fingerprint interpretation. By 1989, he was known within the department to hold an interest in this area. It was in that year and the subsequent that the Department of Correction City of New York authorized my attendance into the FBI fingerprint classes. From 1979 to the present, he has been conducting independent research on the combination of fingerprint patterns and their frequency for each digit. In reference to the filing of ten set fingerprint record cards, he is familiar with the Henry System of Fingerprint Classification and Filing. However, he has originally noted that the classification formula derived after an examination of the fingerprints varies according to jurisdictional venue. Notwithstanding, all jurisdictions communicate and utilize the National Crime Information Center Fingerprint Classification (NCIC FPC) in the same manner. This was the reason for the development of the NCIC FPC Filing Sequence Formula in 1981, which was later published by the International Association for Identification in February of 1983 and in 2017 was revised and improved for publication in the journal of Medical and Clinical Archives. The aforementioned is a new innovation of the formula that would be beneficial to the law enforcement, academic and medical communities so that we can globally share the interpretations of the same fingerprint pattern discoveries. In addition, he created the Fingerprint Diagonal Reverse Sequence Arrangement which is the central theme of my theory in Sacred Geometry, a fingerprint formula which asserts its foundation on the dimensions of the perimeter of the Great Pyramid Khufu in Giza Egypt, which reflects time and space in its construction. It provides a way in which individuals can work together in harmony by team development according to fingerprint codes. His Research Interests on the correlation that exist between the elevation of the mental manifestation and the phenomenon of the dermal ridge arrangements. His interest in the association between diseases and the configuration of the friction ridge formations is also paramount.

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DISCLAIMER

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