

11.3 Search Frame Configuration

A search frame consists of the block and the four types of frames indicated below:

- 1) "Search frame management frame" is used for managing the entire frame.
- 2) "Category data frame" is used for narrowing down the range in which the matching data.
- 3) "Category definition frame" is used for defining the structure of the record of category data
- 4) "Matching data frame" is used for associating the matching data retrieved by the category data with the corresponding POI information.
- 5) "Matching data definition frame" is used for defining the matching data record

The frames 2) to 5) listed above can be set in any order and entities in the frames can be used shared.

name [Entire structure of the Search Frame]

Management Frame of Search Frame
Category Definition Frame (#1 to #G) [Locatable in any place]
Matching Data Definition Frame (#1 to #G) [Locatable in any place]
Category Data Frame (#1 to #G) [Locatable in any place]
Matching Data Frame (#1 to #G) [Locatable in any place]

11.3.1 Search Frame Management Frame

name [Search Frame Management Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Search Frame Management Frame Header		a
2	16	X		A Sequence of Detailed Search Information Records (#1 to #G)		a

The search frame management frame consists of a 16-byte search frame management frame header and a sequence of detailed index information records. The sequence of detailed index information records has a fixed length in a search frame in which the number of records is G described in the management frame header and the size is X.

11.3.1.1 Search Frame Management Frame Header

name [Search Frame Management Frame Header]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DSRC'	a
2	4	4	N	Number of Matching Data in the Category - G (Number of Detailed Search Information Records)	(1)	a
3	8	4	SWS	Size of Detailed Search Information Records	= X (2)	a
4	12	4	D	Offset to the Top of Detailed Search Information Records	(3)	a

- 1) In general, G indicates 1. However, description for which future expansion is considered is needed.

Used to narrow down the range of matching data in alphabetical order index or telephone number search using a key (such as category and area).

- 2) This field describes the size of a detailed search information record. When there are multiple records, each record size is the same.
- 3) This field describes the offset to its beginning enables future expansion or description of creator-specific data.

Detailed search information records define category data or matching data to be used for search or specify the locations of their entities. They shall be described in a fixed format (with variable length).

11.3.1.2 Detailed Search Information Record

name [Detailed Search Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	(1)	a
2	4	4	SWS	Expansion Field Size	= Lu (2)	a
3	8	4	D	Offset to Expansion Field		a
4	12	4	SWS	Category Definition Frame Size		a
5	16	4	D	Address to the Category Definition Frame	(8)	a
6	20	4	SWS	Category Data Frame Size		a
7	24	4	D	Address to the Category Data Frame	(8)	a
8	28	4	C	Default Keyboard Designation	(6)	a
9	32	4	SWS	Category Parent Record Size	(3)	a
10	36	4	SWS	Category Option Record Size	(4)	a
11	40	4	SWS	First-level Category Size	(5)	a
12	44	4	N	Number of the Option Items of First-level Category	(5)	a
13	48	4	D	Offset to First-level Category	(5)	a
14	52	4	C	Keyboard Designation for the First-level Category	(6)	a
15	56	4	SWS	Matching Data Definition Frame Size		a
16	60	4	D	Matching Data Definition Frame Address	(8)	a
17	64	4	SWS	Matching Data Frame Size		a
18	68	4	D	Matching Data Frame Address	(8)	a
19	72	4	SWS	Size of the Record of Matching Data Frame		a
20	76	4	N	Total Number of the Records of Matching Data Frame	(7)	a
21	80	4	N	Default POI Information Serial Number	(9)	a
22	84	4	SWS	Next-level of Data Frame Size	(10)	a
23	88	4	D	Next-level Data Frame Address	(10)	a
24	92	B1		Character Information Data List for Representation Item	(11)	a
25	O1	B2		A Sequence of Additional Frame Address(es) (#1 to #4)	(8)	c
26	O2	B3		Expansion Field	(12)	c
27	O3	B4		Padding Field		c

Note: For items 25 and 26, their storage areas can be specified with items 5, 7, 16 and 18. Thus, their locations in the detailed index information record are arbitrary.

However, their sizes must be within the detailed index information record size specified for the higher hierarchy search frame management frame header using items 25 to 27.

- 1) This field describes the data declaration for the guideline of search method.

For example:

- | | |
|---|---|
| a) Alphabetical order index (signature) | 'SRAO' = 'SeaRch by Alphabetical Order' |
| b) Address index (Japan) | 'SRJP' = 'SeaRch by JaPanese area' |
| c) Telephone number index | 'SRTN' = 'SeaRch by Telephone Number' |
| d) (Simple) Hierarchy index | 'SRNR' = 'SeaRch (NorMal)' |
| Genre index | 'SRGN' = 'SeaRch by GeNre' |
| e) (Mixed) Hierarchy index | 'SRMX' = 'SeaRch (MiXed)' |
| f) Nearby index | 'SRAR' = 'SeaRch by ARound' |

- 2) Expansion Field Size and Offset

The offset to expansion field stores the displacement from the beginning of the detailed index information record to the beginning of the expansion field.

When no expansion field is set, set 0 (disabled) to its size and offset.

- 3) Category Parent Record Size

This field describes the size of a category excluding the option data. When it is a fixed length, describes the absolute value. When it is a variable length, this field describes the maximum size of data to be read.

- 4) Category Option Record Size

This field describes the size of a single category option record. When it is a fixed length, describes the absolute value. When it is a variable length, describes the maximum size of a record to be read.

- 5) Size, Number of the Option Items and Offset, of the First-level Category

This field describes the size (including the option data), number of option items, and offset (from the beginning of the category data frame) of the category to be read first.

For the second and later levels, specify it in the main record for real-data.

- 6) Keyboard Designation for the First-level Category

This field specifies the keyboard by using a signature.

The keyboard should be designated for the option of the first-level (or the next-level) category data when the keyboard needs to be changed over (and to be specified whether it will be used or not) between hierarchies.

- 7) Total Number of the Records of the Matching Data Frame

This field describes the total number of the records of the matching data.

- 8) Address Representation

This field describe address according to the principle specified in the "address declaration" for the target volume management record (used for step-by-step method retrieval) in Subsection 11.2.2, 9).

- 9) Default POI Information Serial Number

When there are multiple POI Information frames, it is allowed to declare their default values.

POI Information volumes are numbered from 1 in sequence.

When a frame below this search frame does not contain POI Information only, assign "null "(ineffective value, 0) to the POI Information serial number.

10) Next-level of Data Frame Size and Address

If the search frame controls search frames in the levels below and their structures are the same, set the address for storing the next-level search frame management frame when sharing the search frame management frame.

11) Character Information Data List for the Representation Item

This field describes a character string by language that is required to display data for the representation item.

How to describe data conforms to the representation item character information data list in Subsection 11.2.2, 13).

12) Expansion Field

This field stores the expanded data for the detailed index information records according to the expansion method described in Section 1.4.

The expansion field is space user can use for any purpose. (It is intended for future expansion.)

In this field, it is allowed to record specific data for determining the locations of dedicated information (such as data extracted at intervals of the specified number of records when there is a lot of matching data.